T.S.A.

MAR 3 1 1988

Mr. Glenn Miller, Administrator
Hazardous Waste Division
Louisiana Department of Environmental Quality
Office of Solid and Hazardous Waste
P. O. Box 44307
Baton Rouge, Louisiana 70804

Dear Mr. Miller:

Enclosed you will find a copy of the following Preliminary Review (PR):

Facility Name: Colfax Creosoting Co.

EPA ID Number: LAD008184616

Additional information will be forwarded to you as it becomes available. If you have any questions, please contact me or have your staff contact Lydia Boada Clista at (214) 655-6790.

Sincerely yours,

Sam Becker, P.E.
Chief
Hazardous Waste Compliance Branch

Enclosure

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6H-CT

3-31 Allen
6H-CT

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MEMORANDUM

Subject: Transmittal of Preliminary Review Report

From: Erlece P. Allen, Chief
Technical Section (6H-CT)

To: William K. Honker, Chief
Permit Section (6H-CP)

Attached please find a copy of the following Preliminary Review (PR):

° Facility Name: Colfax Creosoting Co.

° EPA ID Number: LAD008184616

The PR report for this facility is currently under review in the Technical Section. A copy of the PR Evaluation will be sent to you as soon as it is completed.

Attachment

cc: Sam Becker (6H-C)

6H-CT:BVidean:3/16/88x6790 DISC #1 File L031

6H-CT
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III.S.A.

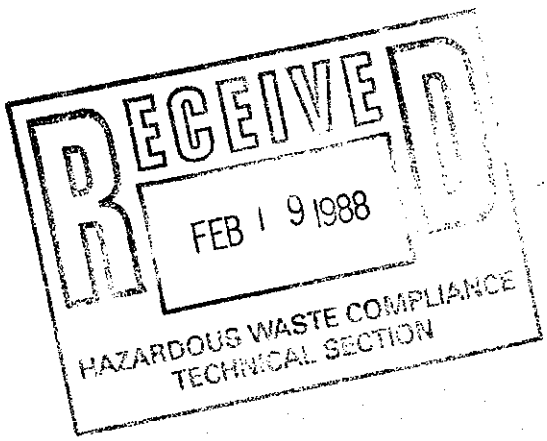
LAD008184616

Colfax Creosoting Company

Wood Treatment Facility

Preliminary Review

Draft 2



1. INTRODUCTION

1.1 PURPOSE AND SCOPE OF THE RFA PROGRAM

The 1986 Hazardous Solid Waste Amendments (HSWA) give the EPA new authority to require comprehensive corrective actions of solid waste management units (SWMU), and other areas of concern at interim status hazardous waste management facilities. HSWA applies particularly to facilities applying for RCRA permits. Corrective actions are intended to address unregulated releases of hazardous constituents to air, surface water, soil and ground water, and the generation of subsurface gas.

A major segment of this program consists of RCRA Facility Assessments (RFA) to identify releases or potential releases requiring further investigation. According to the EPA RCRA Facility Assessment Guidance Document, the four-fold purpose of the RFA is to:

1. Obtain data about releases at RCRA regulated facilities.

2. Evaluate SWMUs and other areas of concern for releases to all media, and evaluate regulated units for releases other than ground water.

3. Determine releases of concern and the need for further actions and interim measures at the facility.

4. Screen from further investigations those SWMUs which do not pose a threat to human health and the environment.

The three basic steps of the RFA consist of a preliminary review (PR) of available information, a visual site inspection (VSI) to obtain additional information on releases, and a sampling visit (SV) to fill data gaps by obtaining field and analytical data.

1.2 CONTENTS OF REPORT

This report contains the results of the preliminary review of the Colfax Creosoting Company Wood Treatment Facility in Pineville, Louisiana. Information was obtained from the Facility Closure Plan and Groundwater Monitoring Program submitted by Colfax to the Louisiana Department of Environmental Quality (LADEQ), RCRA investigative reports from the state and EPA, correspondence between Colfax and LADEQ, and analytical results obtained by state representatives and Colfax contractors. These documents were obtained from file searches of the EPA Regional Office in Dallas and LADEQ in Baton Rouge.

Section 2 of this report describes the Colfax facility, and its historical and current operations. Individual SWMUs are identified, with a summary description of the wastes managed by the facility. Section 3 offers an overview of the facility's environmental setting, comprising meteorology and air quality, floodplain and surface water, geology and soil, ground water, and receptor information. Section 4 assesses release pathways, covering the potential for release to soil, ground water, surface water, and air. Section 5 details documented releases and the SWMUs associated with the release. Section 6 presents conclusions, summarizing areas of concern and indicates where further investigation is warranted.

2. FACILITY DESCRIPTION

2.1 LOCATION

Colfax Creosoting Company, located on Wadley Road, Pineville, Rapides Parish, Louisiana (Figure 1 and Figure 2), is comprised of two separate parcels of property. Parcel A (Figure 3), owned by the Kansas City Southern Railroad, and leased to the company on a year-to-year basis, contains the wood treatment and processing facilities. Parcel B (Figure 3), owned by the Kansas City Southern Railroad, and leased to the company on a year-to-year basis, contains the wood treatment and processing facilities. Parcel B, a 40 acre tract of land owned by the company, contains several surface impoundments which were once utilized in a hazardous waste recovery system operated on the premises. Colfax Creosoting Company is located at 92° 26′ 00" longitude, 81° 19′ 10" latitude, Township 4 North, Range 1 West, Section 21.

2.2 HISTORICAL AND CURRENT OPERATIONS

Colfax Creosoting Company is a branch of Roy O. Martin Lumber Co., Inc., established in 1923 by Roy O. Martin. Colfax Creosoting has been in operation at this facility since 1948, when the plant was moved to this location from Colfax, Louisiana. The methods of wood treatment utilized creosote, pentachlorophenol (penta), and copper, chromium and arsenic (CCA). Although the company uses all of these preservatives, creosote accounts for approximately 80% of the total, while penta production is approximately 19%. CCA treatment is usually less than 1% of the total plant production.

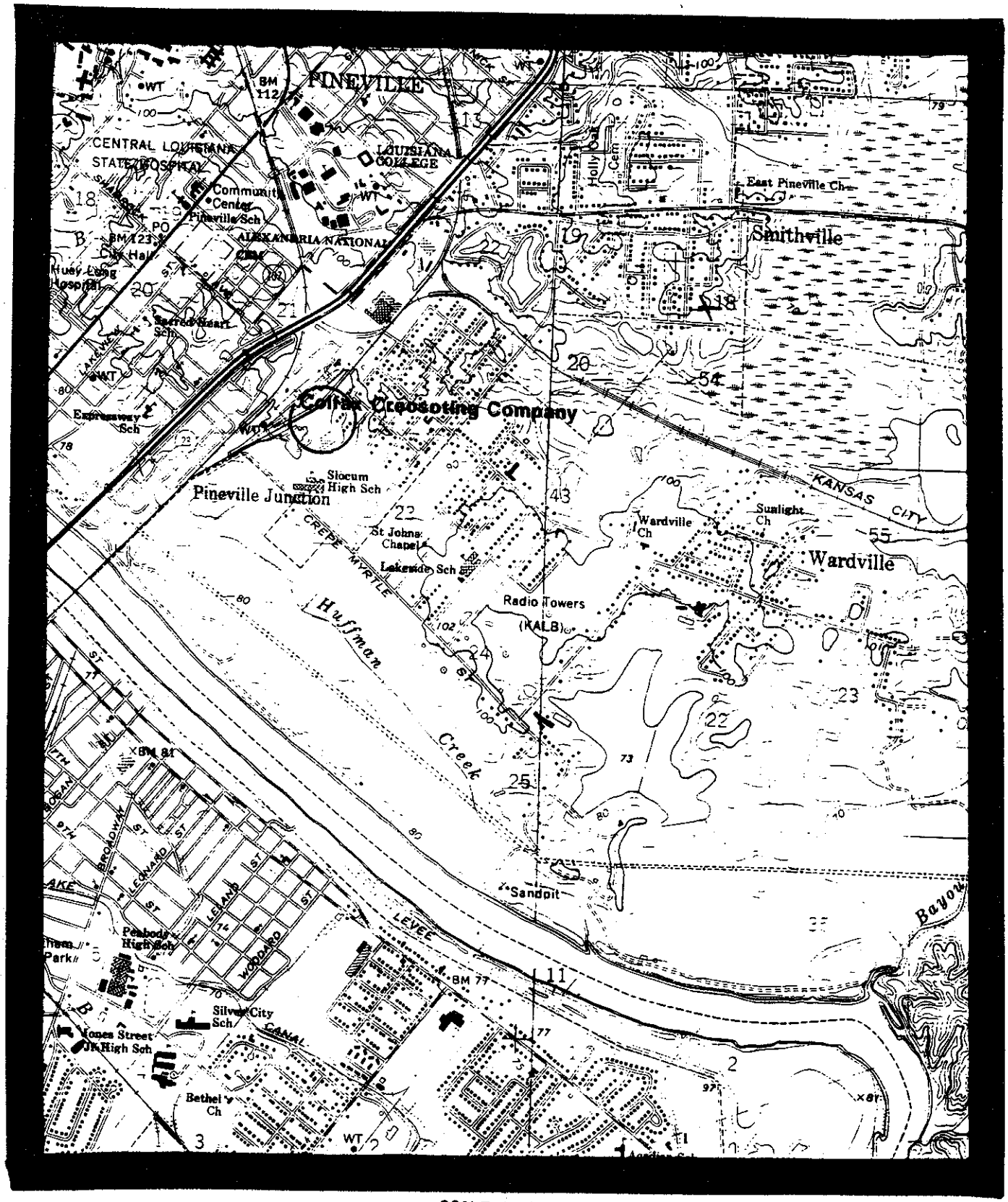
The CCA process differs from the penta and creosote processes in that CCA is process water-demanding, while penta and creosote are process water-bearing methods. In the CCA method, any process spill generated at the CCA portion of the plant is captured together with stormwater runoff, and stored in above-ground steel tanks. The collected water is used to dilute the concentrated CCA solution for the next batch of preservative. The CCA method also utilizes additional make-up water from an outside source and generates little process water. On the other hand, the creosote and penta systems generate approximately 10,000 gallons of process water per day.

The process water generated by the penta and creosote processes more than satisfies the water need of the CCA method, therefore, the surplus water needs to be discharged.

Until late 1983, all process water was released to a surface impoundment south of the production facility. Water not reclaimed in the CCA process was evaporated through a spray system. When ground water contamination was detected in a well downgradient of the surface impoundment, the state ordered that no further discharge be made, and

Figure 1

Colfax Creosoting Company



SCALE 1:24 000

1 MILE

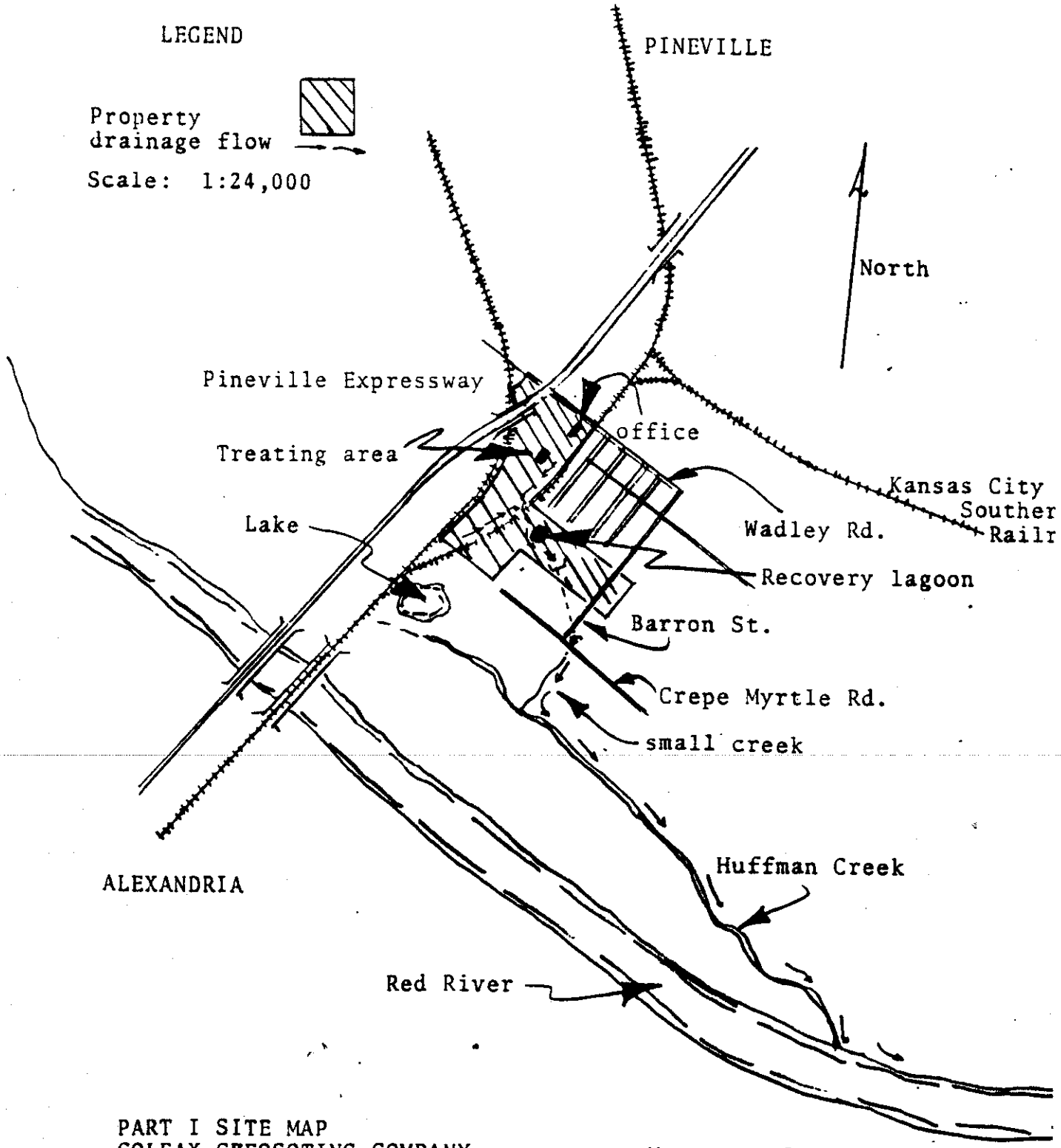
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

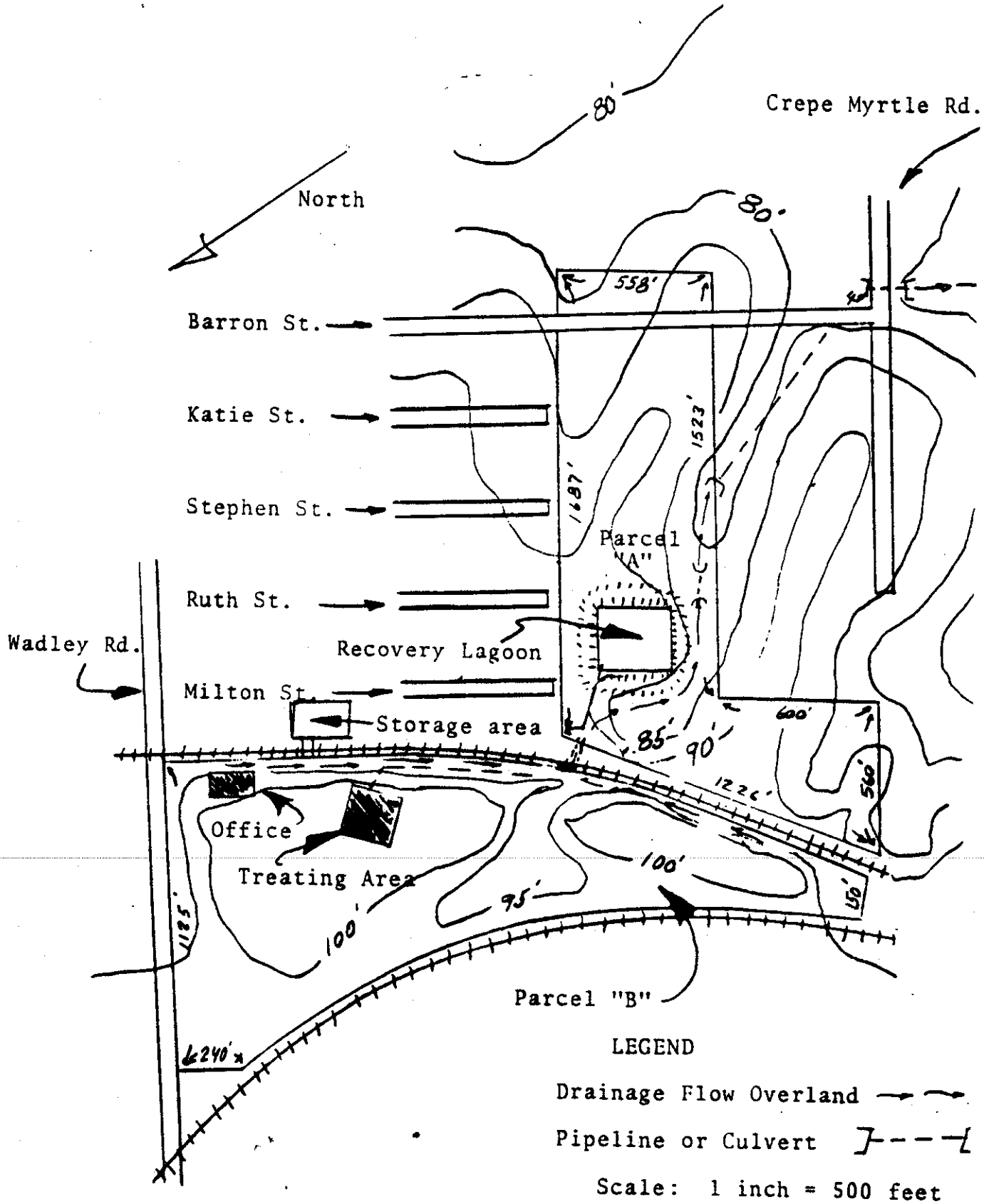
QUADRANGLE LOCATION

ALEXANDRIA,
SW/4 ALEXANDRIA 15' QUAD
N3115—W9222.5/7



PART I SITE MAP
COLFAX CREOSOTING COMPANY
PINEVILLE, LA.

Note: surface contours, etc. shown on other sheets



PART I CONTOUR AND PROPERTY DIMENSION MAP
COLFAX CREOSOTING COMPANY
PINEVILLE, LA.

that the company officially close the surface impoundment. Subsequently the impoundment was closed, and it is currently in the post-closure phase of remediation.

The company currently operates an above-ground process water recovery system and a water treatment facility to handle the generated process water. Treated process water is discharged into the Pineville sewer system under a permit issued by the City of Pineville.

2.3 IDENTIFICATION OF SOLID WASTE MANAGEMENT UNITS

Forty-two potential SWMUs have been identified (Table 1) during the preliminary review.

Solid Waste Management Units

#1 Treated Wood Storage Areas - Four (Table 1, Ref. 1-4, and Figure 4) of the identified solid waste management units are areas for treated wood storage. These areas may be contaminated from continual dripping of preservatives from the treated wood onto the ground.

#2 Pits and Impoundments - Eight (Table 1, Ref. #5-12, and Figure 5) of the identified solid waste management units are associated with the surface impoundments. These were utilized as a discharge and recovery system for process water generated by the penta and creosoting processes. Documentation shows that these eight SWMUs contribute to the contamination of the ground water downgradient of the impoundments.

#3 Process area units - Twenty eight(Table 1, Ref #13-40, and Figure 6) of the solid waste management units assosciated with the process area are included due to the fact that they are continually utilized in the storing, processing and recovery of the hazardous wastes present at this facility.

#4 Contaminated Soils - Solid waste management unit 41 (Table 1, Ref. #41) was referred to in an inspection report from LADEQ, dated 8/29/85. This report identified only the presence of contaminants in the process area. No exact location was given.

#5 Drummed Creosotes - Solid waste management unit 42 (Table 1, Ref #42) was referred to in an inspection report from LADEQ, dated 12/20/84. This report identified only the presence of contaminants in the process area. No exact location was given.

Solid Waste Management Units For Colfax Creosoting

REF.#	Location	Documented Release	
1	Treated Wood Storage	No	
2	Treated Wood Storage	No	
3	Treated Wood Storage	No	
4	Treated Wood Storage	No	
5	Contaminated soil (WASTE PILE)	Yes	
6	Waste Recovery Pond	Yes	POST CLOSURE PHASE OF REMEDIATION (P.9)
7	Waste Recovery Pond	Yes	
8	Surface Impoundment	Yes	
9	Sludge Pit	Yes	
10	Sludge Pit	Yes	
11	Sludge Pit	Yes	
12	Sludge Pit	Yes	
13	Creosote Cylinder	No	
14	CCA Cylinder	No	
15	Penta Cylinder	No	
16	Steaming Cylinder	No	
17	CCA Storage Tank	No	
18	Creosote Water Tank	No	
19	Penta Water Tank	No	
20	CCA Water Tank	No	
21	WR Water Tank	No	
22	Duratreat Water Tank	No	
23	Duratreat Conc Storage	No	
24	Penta Storage& Mix Tank	No	
25	Penta Mix Tank	No	
26	Penta Unloading Area	No	
27	Creosote Unloading Area	No	
28	Treating Room	No	
29	Creosote Storage	No	
30	Creosote Storage	No	
31	Creosote Storage	No	
32	Cooling Pond	No	
33	Water Storage	No	
34	Creosote Storage	No	
35	Creosote Storage	No	
36	Creosote Separator	No	
37	Creosote Storage	No	
38	Creosote Separator	No	
39	Creosote Separator	No	
40	Penta Separator	No	
41 *	Contaminated top soils	No	
42 *	Drummed Creosote	No	

* SWMU DOCUMENTED WITHOUT PRECISE LOCATION

Anayltical Results for Colfax Creosoting Company

Monitoring Well Results in ppm of Phenols

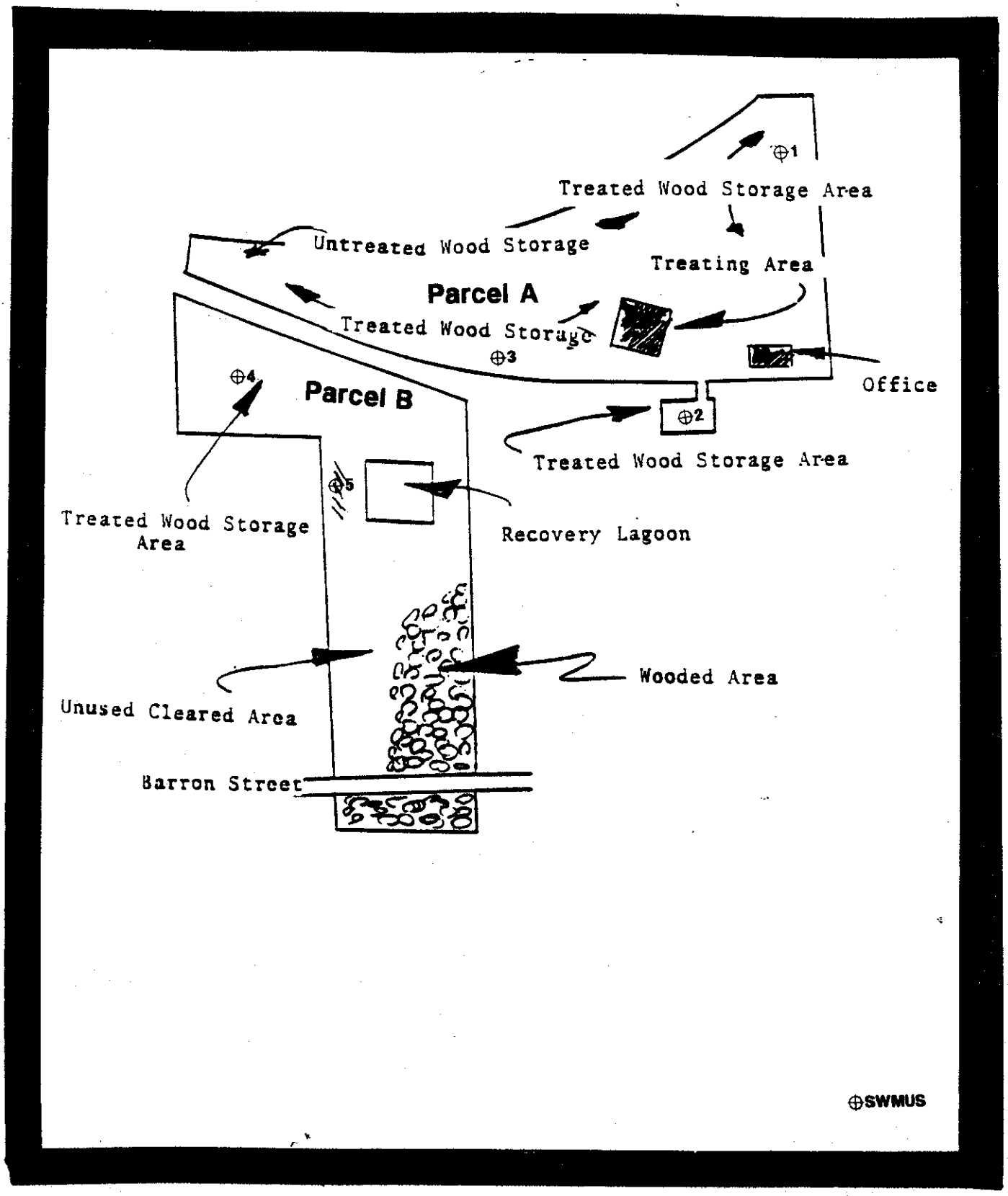
Date of Sampling	MW1	MW2	MW3	NMW3	MW4
3/16/83	.001	.001	.14	na	na
9/7/84	U	.02	na	.05	U
12/10/85	<005	<007	na	.072	<005

Borings Sample Results in ppm Total K001 Constituents and ppm Total Phenols

Boring Cell #	1	2	4	5	8	9
Total K001	.2	2.13	4.3	.04	.038	3.53
Total Phenols	.08	.03	3.9	.03	.03	2.41

Site Master Sketch

Figure 4



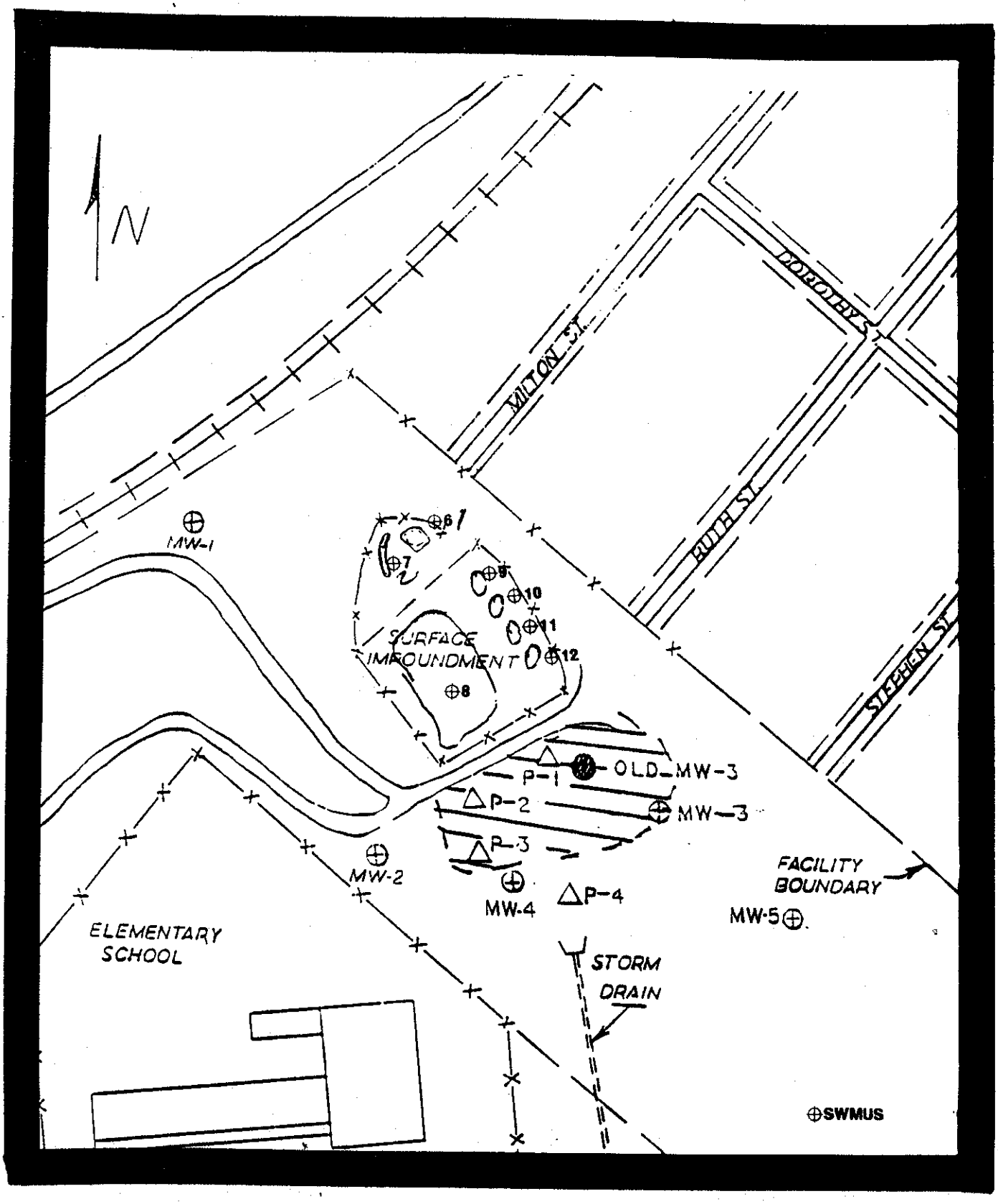
Colfax Creosoting Company

Pineville La.

LAD008184616

Impoundment Diagram

Figure 5



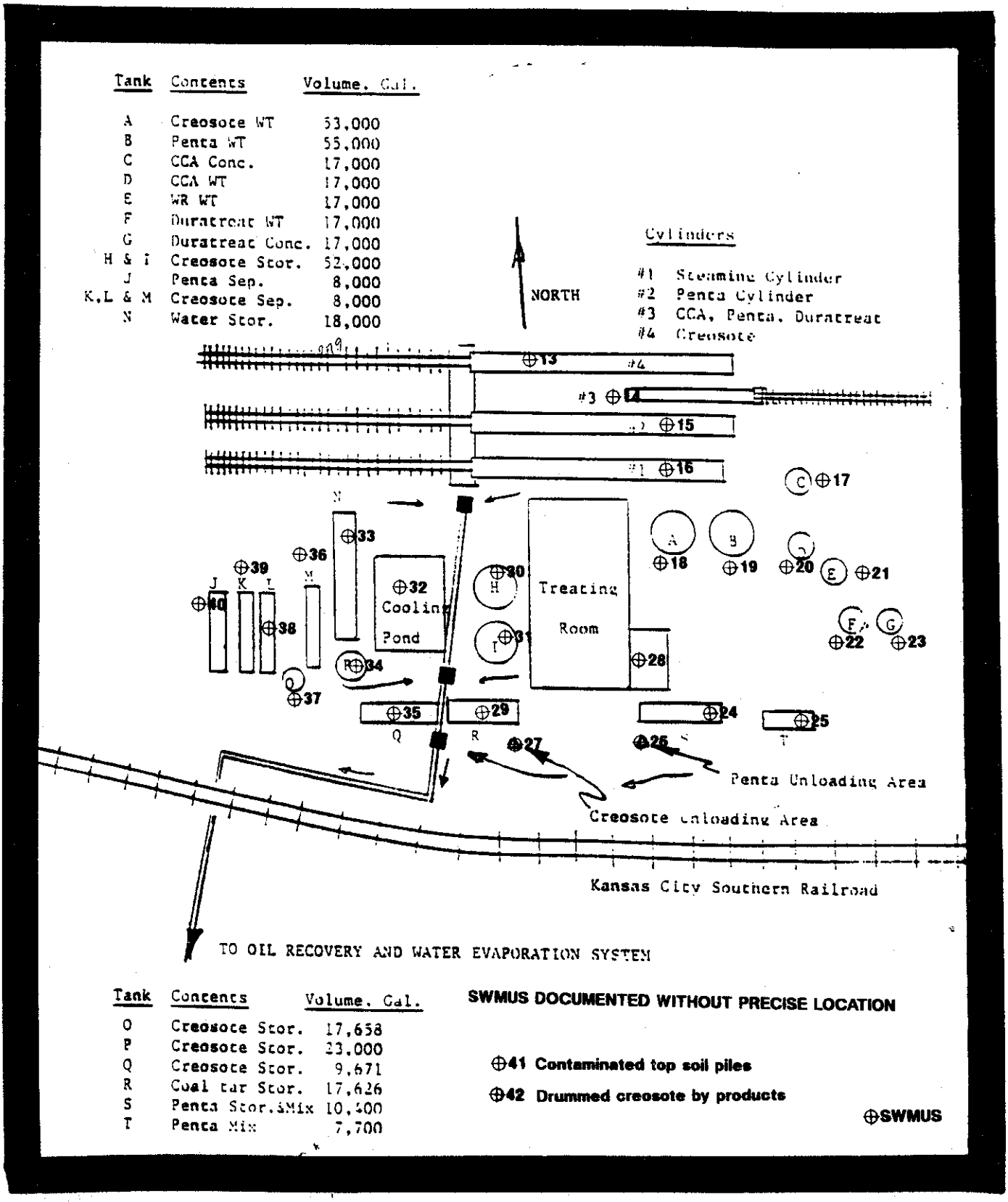
Colfax Creosoting Company

Pineville La.

LAD008184616

Facility Diagram

Figure 6



Colfax Creosoting Company

Pineville La.

LAD008184616

2.4 SUMMARY OF WASTES PRESENT

Creosote, penta chloraphenol, chromium, copper, and arsenic are the hazardous wastes of concern on-site. These contaminants and their by-products may be present in varying concentrations in the top soils, surface water, and groundwater within the site boundary and surrounding area. Creosote by-products (Table 2) and penta have been documented in the borings taken from the impoundment sludges. Groundwater contamination by phenols and chloride has been documented in monitoring well #3 downgradient of the impoundment.

CREOSOTE COMPOUNDS

	Formula	Boiling Point	Concentration Range
Coumarone	C_8H_6O	174	A
p-Cymene	$C_{10}H_{14}$	177	A
Indene	C_9H_8	182	A
Phenol	C_6H_6O	181	A
O-Cresol	C_7H_8O	190	A
Benzonitrile	C_7H_5N	191	A
m-Cresol	C_7H_8O	202	A
Naphthalene	$C_{10}H_8$	218	D
Thionaphthene	C_8H_6S	222	A
Quinoline	C_9H_7N	243	A
2-Methylnaphthalene	$C_{11}H_{10}$	241	B
Isoquinoline	C_9H_7N	238	A
1-Methylnaphthalene	$C_{11}H_{10}$	245	A
4-Indanol	$C_9H_{10}O$	245	B
2-Methylquinoline	$C_{10}H_9N$	247	A
Indole	C_8H_7N	252	A
Diphenyl	$C_{12}H_{10}$	255	A
1, 8-Dimethylnaphthalene	$C_{12}H_{12}$	262	A
2, 3-Dimethylnaphthalene	$C_{12}H_{12}$	266	A
Acenaphthene	$C_{12}H_{10}$	281	D
Dibenzofuran	$C_{12}H_{10}O$	287	D
Fluorene	$C_{13}H_{10}$	299	D

Table

Table 2
(cont.)

	Formula	Boiling Point	Concentration Range
1-Naphthonitrile	$C_{11}H_7N$	297	A
3-Methyldiphenylene	$C_{13}H_{10}O$	298	B
2-Naphthonitrile	$C_{11}H_7N$	304	A
9, 10-Dihydroanthracene	$C_{14}H_{10}$	305	B
2-Methylfluorene	$C_{14}H_{12}$	318	B
Diphenylene Sulfide	$C_{12}H_8S$	332	B
Phenanthrene	$C_{14}H_{10}$	340	D
Anthracene	$C_{14}H_{10}$	342	C
Acridene	$C_{13}H_9N$	346	A
3-Methylphenanthrene	$C_{13}H_{12}$	350	B
Carbazole	$C_{12}H_9N$	352	B
4, 5-Methylenephenanthrene	$C_{15}H_{10}$	353	B
2-Methylanthracene	$C_{15}H_{12}$	360	A
9-Methylanthracene	$C_{15}H_{12}$	361	B
2-Methylcarbazole	$C_{13}H_{11}N$	363	B
Fluoranthene	$C_{16}H_{10}$	382	D
1, 2-Benzodiphenylene	$C_{16}H_{10}O$	395	B
Pyrene	$C_{16}H_{10}$	393	B
Benzofluorene	$C_{17}H_{12}$	413	B
Chrysene	$C_{18}H_{12}$	448	B
Unidentified Compounds in Distillate			D

A = Compounds having a concentration less than 0.5%
B = Compounds having a concentration greater than 0.5% and less than 3.0%
C = Compounds having a concentration greater than 3.0% and less than 5.0%
D = Compounds having a concentration greater than 5.0%

3. ENVIRONMENTAL SETTING

3.1 METEOROLOGY AND AIR QUALITY

The climate in the Pineville-Alexandria area is warm and humid. Annual mean relative humidity is 73%. The average high temperature in the area (July) is 93°F; the average low temperature (February) is 41°F. Annual precipitation is 60 inches per year. The prevailing winds are in a northerly direction. A wind rose is presented in Figure 7.

3.2 FLOODPLAIN AND SURFACE WATER

The Red River 100-year floodplain extends onto the southern portion of the Colfax facility (Figure 8), and is approximated by the 90-foot topographic contour line. The floodplain borders the western half of the surface impoundment, and includes the contaminated drainage ditch west of the impoundment (see Figure 5).

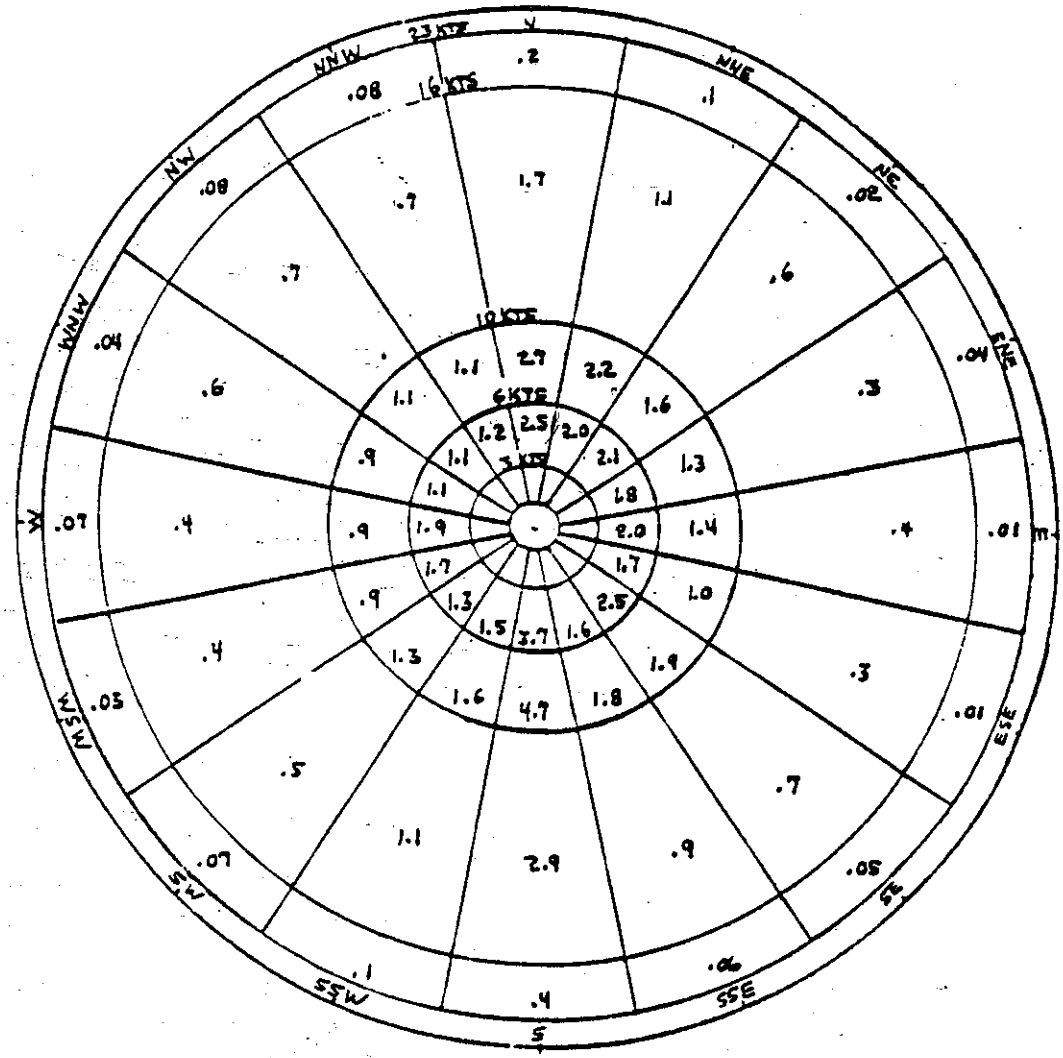
The Red River is the closest major downstream surface water body (Figures 8 and 9). All surface runoff from the facility flows south in an intermittent stream for approximately 0.5 mile before discharging into the Huffman Creek, which flows southwest and discharges into the Red River. The surface water runoff path from the facility boundary to the Red River is 1.7 miles.

3.3 GEOLOGY AND SOILS

The Red River Valley Alluvium immediately underlies the facility. This stratigraphic unit consists of clay and silt. Several on-site soil borings revealed this unit at a depth of 5 to 15 feet below land surface. Allowing for land surface elevation, the unit appears to have a relatively horizontal base at the facility.

Pleistocene Upland deposits underlie the alluvium. Upland deposits are generally less than 100 feet thick in the region of the facility. The deposits are generally sandy, with gravel in the lower depths. There are substantial amounts of clay in the upper part of the unit in some areas. The color of the near surface material is most commonly influenced by the relative amounts of yellow and iron-red sediments.

The Upland deposits are underlain by Miocene age sands. These sediments contain thick, predominantly sand intervals, alternating with thinner clayey zones. The Miocene sand beds are approximately 1,000 feet thick beneath the facility. This unit is the deepest fresh-water bearing unit under the facility.



Annual Wind Rose Diagram for Alexandria La.

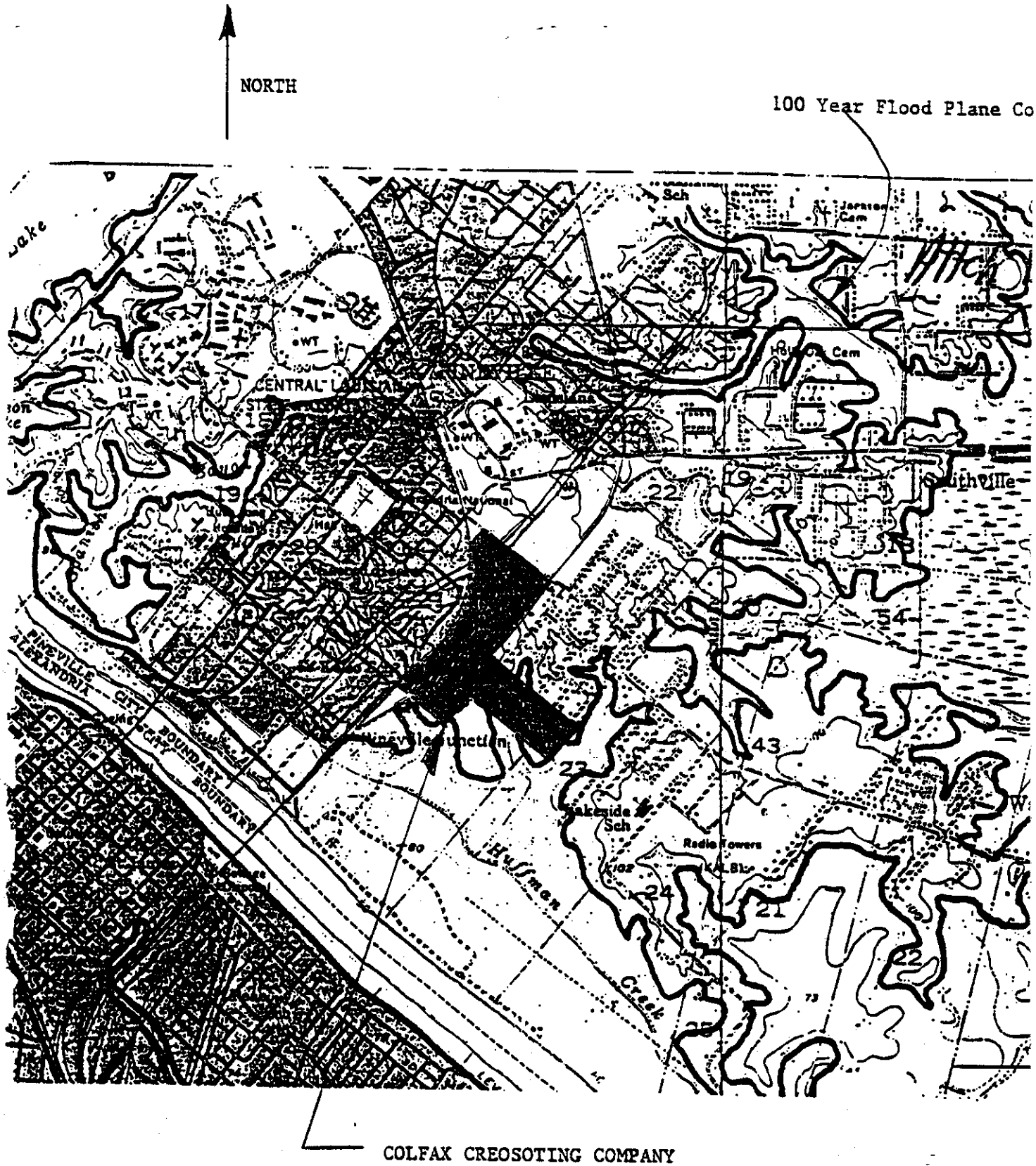
Colfax Creosoting Company

Pineville La.

LAD008184616

Fig. A - -

Figure 8



100 YEAR FLOOD PLANE MAP

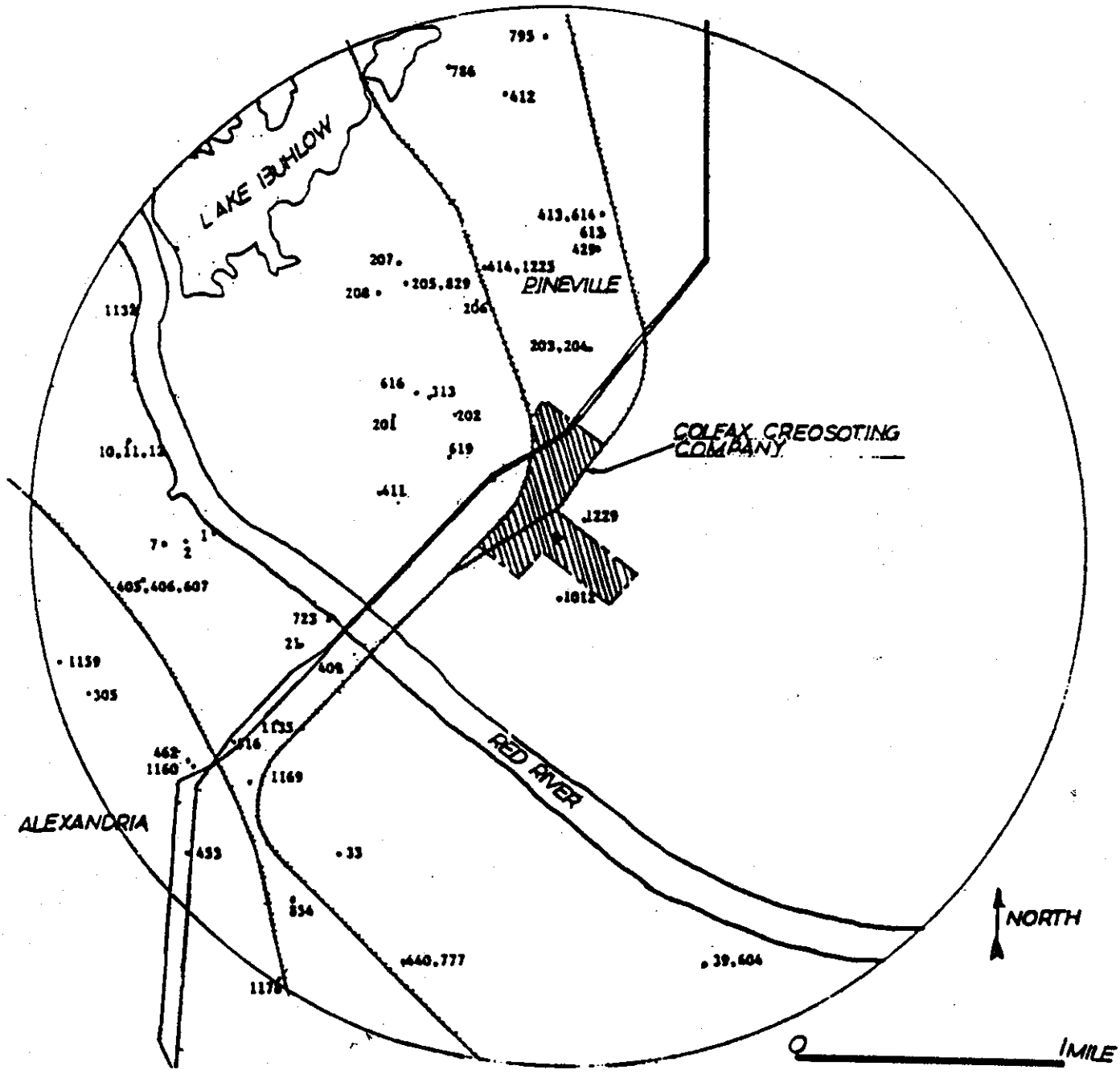


FIGURE 2

LOCATION OF WATER WELLS WITHIN 2 MILES OF IMPOUNDMENT BASED ON LA. DEPARTMENT OF PUBLIC WORKS RECORDS

3.4 GROUND WATER

A perched water table was reported in the Red River Valley Alluvium. Depths to the perched water table were reported in two of the three boreholes: eight feet in one and nine feet in another.

The water table beneath the facility is located in the Pleistocene Upland deposits. The depth to water is approximately thirty feet below land surface. Ground water in the Pleistocene aquifer flows toward the southeast.

Recharge to the Pleistocene aquifer occurs mostly through rainfall percolation. Hydraulic conductivities as high as 10^{-1} cm/sec were reported. Wells in this unit generally yield 100 to 200 gallons per minute (gpm). The water is soft, acidic, and contains less than 150 parts per million (ppm) of dissolved solids.

Hydraulic conductivities in the Miocene sands generally range from 10^{-3} to 10^{-2} cm/sec. Wells in the Alexandria area generally yield 300 gpm from this unit. The sodium bicarbonate water in the Miocene sands is soft and slightly alkaline. Dissolved solids generally are less than 500 ppm.

3.5 RECEPTOR INFORMATION

Colfax Creosoting Company is located in a residential and commercial area in Pineville. Within a one mile radius, there are five schools, one university, fifteen churches, two hospitals, the Pineville City Hall and a community center. Approximately 2,000 people live within a one-mile radius of the facility.

Fifty-two wells have been identified within a 2-mile radius of the facility (Figure 9). Twenty-four of the wells are located on the same side of the Red River as the facility.

4. RELEASE PATHWAYS

4.1 AIR RELEASE PATHWAYS

Some wastes utilized at this facility (creosote, penta and creosote by-products) are organic in nature and may be volatilized. The high temperatures of the region increase the chance for volatilization; however, the high humidity (73%) would significantly decrease the chance for release of these compounds into the atmosphere. Due to these conflicting environmental factors, release of hazardous constituents into the atmosphere would be minimal.

4.2 SURFACE WATER PATHWAYS

Runoff from the facility enters a ditch and flows to an intermittent stream south of the property (see Figure 2). Process area runoff is not contained.

The ditch contains deposits of a substance resembling K001 with a distinct creosote smell. Runoff from the site could pick up hazardous substances from the process, and other areas, and transport them to the Red River. The drainage ditch is within the Red River 100-year floodplain.

4.3 SOIL PATHWAY

A creosote-like substance in the soil was reported in the process area, at the bottom of the unlined surface impoundments, and at other unspecified areas. There is no documentation indicating any containment structures which would prevent the migration of contaminants in the soil.

4.4 GROUND WATER PATHWAY

Ground water contamination has been documented downgradient of the large surface impoundment. The upgradient monitoring well has not shown contamination, but K001 constituents have been identified in at least one downgradient monitoring well.

The only documented ground water sampling data were obtained near the surface impoundments. The possibility of additional on-site sources of ground water contamination cannot be excluded.

5. DOCUMENTED RELEASE

5.1 GROUND WATER RELEASE

A documented release to ground water was observed by LADEQ on March 16, 1983 during a routine compliance sampling of the Colfax ground water monitoring system. A concentration of .14 ppm phenols were detected downgradient of the impoundment in monitoring well #3. As a consequence of this contamination, a new monitoring well #3 was installed downgradient of the original monitoring well #3. Monitoring well #2 was installed in December, 1983, in response to an order issued by LADEQ.

All existing monitoring wells were sampled again in September, 1984. No significant concentrations of phenols were detected. Sampling in December 1985 showed a high concentration of phenols in the new monitoring well #3. Once again, Colfax installed a new downgradient well (#5) to determine the plume of contamination. No contaminants were detected in monitoring well #5.

5.2 SOLID WASTE MANAGEMENT UNITS RESPONSIBLE FOR RELEASE

It is stated in a ground water assessment plan for Colfax, dated July 7, 1984, that the downgradient ground water contamination originates from the surface impoundments (Ref. #5-12). Borings taken from sludges in the area of the large surface impoundment (Ref. #8) show contamination by phenols. No borings were taken from the other units within the area of the large surface impoundment (Ref. #5-7, 9-12); however, there is documentation stating that the contents of the two process water ponds and the four sludge pits contain the same hazardous wastes as found in the large surface impoundment. Therefore, it can be concluded from these factors that these units are also contributing to the downward migration of hazardous wastes into the ground water pathway.

The contaminated soil (Ref. #5) is indicated to be a waste pile, located approximately 50 yards west of the surface impoundment. There is documentation stating that the pile appears to consist of the same material as that accumulated at the bottom of the large surface impoundment. It is likely that this material is seeping into the ground and contributing to the downward migration of contaminants into the groundwater pathway.

5.3 MITIGATIVE ACTION

Colfax Creosoting Company is currently in the post-closure phase of remediation for the two smaller waste recovery ponds (Ref. #6, 7), the large surface impoundment (Ref. #8), and the four sludge pits (Ref. # 9-12).

6. CONCLUSIONS

A review of EPA and LADEQ files of the Colfax Creosoting Company resulted in the following conclusions:

1. There has been a documented release of hazardous waste to the ground water from the large surface impoundment (SWMU Ref. #8).

2. File documents indicate that the smaller impoundments (SWMU Ref. #6, 7, 9, 10, 11 and 12) have released contaminants into the soil, and possibly into the ground water.

3. File documents suggest that the waste pile west of the impoundments (SWMU Ref. #5) has released contaminants into the soil and the surface water runoff pathway.

4. File documents also indicate spills in the process area, and storage of contaminated materials without proper containment structures. The exact locations were not specified in the files.

With the exception of one waste pile (SWMU Ref. #5) and the surface impoundments (SWMUs Ref. #6 through #12), the files do not contain sufficient detail to determine spills from other SWMUs. There is no information available to identify the process units which produced spills; the frequency of spills, and the locations of storage areas containing hazardous wastes. A visual inspection of each SWMU, and interviews with state regulators and facility representatives is necessary to fill the information gaps.

GROUND-WATER MONITORING PROGRAM EVALUATION
PERFORMED FOR
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
BY
THE EARTH TECHNOLOGY CORPORATION
UNDER
EPA CONTRACT NO. 68-01-6515
WORK ASSIGNMENT R06-018

COMPANY: Colfax Creosoting Co. EPA ID#: LAD008184616

COMPANY ADDRESS: P.O. Box 231
Pineville, LA 71360

PREPARER'S NAME: E. Fernandez-Obregon DATE: September 10, 1984

PROGRAM DESCRIPTION: Alternate Assessment Program

REGULATORY DEFICIENCIES

- Subsequent to the determination of statistically significant increases in the values for contamination indicator parameters for the downgradient wells, additional ground-water samples were not obtained from those wells where the significant differences were detected, and chemical analyses of ground-water samples were not performed to verify the initial results, as required under 265.93(c)(2) and 23.37d).

- A ground-water quality assessment plan that meets the requirements outlined in 265.93(d)(3) and 23.37g) was not submitted within fifteen days after the notification under 265.93(d)(1) and 23.37e), as required by 265.93(d)(2) and 23.37f).

  The plan submitted by the facility in response to a Consent Order issued by LADEQ on October 7, 1983, did not specify the number, locations, and depths of additional monitoring and observation wells which were planned for the assessment program, nor did the plan describe the sampling, analytical, and evaluation methods to be utilized during the course of the assessment.

- The first determination of the rate and extent of contaminant migration and the concentrations of hazardous wastes or hazardous waste constituents in the ground water was not made as soon as technically feasible, to satisfy the regulatory requirements set forth in 265.93(d)(5) and 23.37i).

  A report containing a written assessment of the ground-water quality was not submitted to the Administrative Authority within fifteen days after completion of the initial determination.

- The initial assessment of ground-water contamination at Colfax Creosoting Co. did not include a determination of the horizontal and vertical rates of contaminant migration, as required by

265.93(d)(4)(i) and 23.37h)i). The facility's consultant apparently has assumed that the contaminant of concern (creosote) travels through the permeable zone at the same rate as unaffected ground water. As the specific gravity of creosote is known to be higher than that of water, this assumption is unacceptable.

- Quarterly determinations of the rate and extent of contaminant migration and of the concentratins of hazardous wastes or hazardous waste constituents have not been made in accordance with the regulatory requirements outlined in 265.93(d)(7).

TECHNICAL COMMENTS

- A regional hydrogeologic map of the area indicating major areas of recharge/discharge and the regional ground-water flow direction should be presented.

- A revised site-specific potentiometric surface map showing ground-water flow lines and static water levels recorded for each monitoring well should be submitted.

- Additional monitoring well construction details concerning the depths to, and diameters and lengths of sand packs around well screens should be provided for Wells 1-4. The length of the well casing and well screen information should be specified for Well No. 4. Complete construction details for the observation wells utilized as part of the assessment program should be submitted. The method(s) utilized to develop wells after installation should be outlined.

- The specific method utilized for sample collection in the field should be identified. Review of the facility's sampling and analysis plan reveals that samples are obtained "using either a submersible pump, positive displacement pump, or other means to obtain representative samples." In order to minimize the potential for variability in analytical results, reference to a single sampling technique should be made in the sampling and analysis plan and adherence to this sampling method should be maintained by sampling personnel.

- The length of time that samples are held between sample collection and laboratory analysis should be indicated. It is presently unclear whether ground-water samples are shipped under cold conditions (ice packs) to prevent sample degradation; the facility should demonstrate that provision is made to store and ship samples under refrigeration.

- The chain-of-custody control form should be amended to include the signature and affiliation of the sample shipper.

APPENDIX A-2

INSPECTION COMPLIANCE FORM FOR A FACILITY WHICH MAY BE AFFECTING GROUND-WATER QUALITY

Company Name: Colfax Creosoting Co. ; **EPA I.D. Number:** LAD008184616

Company Address: P.O. Box 731 Pineville, LA 71360 ; **~~Inspector's~~ Reviewer's Name:** E. Fernandez-Obregon

Company Contact/Official: _____ ; **Branch/Organization:** _____

Title: _____ ; **Date of ~~Inspection~~ Review:** 9/10/84

	Yes	No	Unknown
Type of facility: (Check appropriately)			
a) surface impoundment	1		
b) landfill		0	
c) land treatment facility		0	
d) disposal waste pile		0	
1. Have comparisons of ground-water contamination indicator parameters for the upgradient well(s) 265.93(b) shown a significant increase (or pH decrease as well) over initial background?	✓		
a) If "Yes", has this information been submitted to the Regional Administrator according to 265.94(a)(2)(ii)?		Unknown	
2. Have comparisons of indicator parameters for the downgradient wells 265.93(b) shown a significant increase (or pH decrease as well) over initial background?	✓		
a) If "Yes", were additional ground-water samples taken for those downgradient wells where the significant difference was determined? 265.93(c)(2)		✓	
1) Were samples split in two?	N/A		
2) Was the significant difference due to human (e.g., laboratory) error? (If "Yes", do not continue.)	N/A		

	Yes	No	Unknown
3. If significant differences were not due to error, was a written notice sent to the Regional Administrator within 7 days of confirmation? See facility's Groundwater Assessment Plan (Dec. 3, 1983)	N/A		
4. Within 15 days of notification of the Regional Administrator was a certified ground-water quality assessment plan submitted? 265.93(d)(2)*		✓	(Plan submitted after an Order was issued by the State)
a) Does the plan specify 265.93(d)(3) :			
1) well information (specifics)		✓	
(a) number?		✓	(Locations of existing wells and of proposed well #1 are provided. Location other details of additional observation and monitoring wells, and well construction details for existing wells, are not provided in the groundwater assessment plan).
(b) locations?		✓	
(c) depths?		✓	
2) sampling methods?		✓	
3) analytical methods?		✓	
4) evaluation methods?		✓	
5) schedule of implementation?	✓		
b) Does the plan allow for determination of 265.93(d)(4) :			
1) Rate and extent of migration of hazardous waste or hazardous waste constituents?	✓		
2) Concentrations of the hazardous waste or hazardous waste constituents?	✓		
c) Is it indicated that the first determination was made as soon as technically feasible? 265.93(d)(5)		✓	
1) Within 15 days after the first determination was a written report containing the assessment of ground-water quality submitted to the Regional Administrator?		✓	
d) Was it determined that hazardous waste or hazardous waste constituents from the facility have entered the ground water?	✓		
1) If "No", was the original indicator evaluation program, required by 265.92 and 265.93(b), reinstated?	N/A		
(a) Was the Regional Administrator notified of the reinstatement of program within 15 days of the determination? 265.93(d)(6)	N/A		

*See note Page 2-10

	Yes	No	Unknown
e) If it was determined that hazardous waste or hazardous waste constituents have entered the ground water 265.93(d)(7) :			
1) For facilities where program was implemented prior to final closure, are determinations of hazardous waste or hazardous waste constituents continued on a quarterly basis? (If program was implemented during the post-closure care period, determinations made in accordance with the ground-water quality assessment plan may cease after the first determination.)	___	✓	
(a) Were subsequent ground-water quality reports submitted to the Regional Administrator within 15 days of determination?	N/A	___	
2) Were records kept of the analyses and evaluations, specified in the ground-water quality assessment (throughout the active life of the facility)? 265.94(b)(1)	✓	___	
(a) If a disposal facility, were(are) records kept throughout the post-closure period as well?	Unknown	___	
f) Are annual reports submitted to the Regional Administrator containing the results of the ground-water quality assessment program? 265.94(b)(2)*	N/A	___	(The ground-water quality assessment program is not conducted on a quarterly basis
1) Do the reports include the calculated or measured rate of migration of hazardous waste or hazardous waste constituents during the reporting period?	N/A	___	

*See note Page 4-3

APPENDIX B

GROUND-WATER MONITORING AND ALTERNATE SYSTEM TECHNICAL INFORMATION FORM

1.0 Background Data:

Company Name: Colfax Creosoting Co. ; EPA I.D.#: LAD008184616

Company Address: P.O. Box 237
Pineville, LA
71360

Reviewer's ~~Inspector's~~ Name: E. Fernandez-Obregon ; Date: 9/10/84

1.1 Type of facility (check appropriately):

1.1.1	surface impoundment	1
1.1.2	landfill	0
1.1.3	land treatment facility	0
1.1.4	disposal waste pile	0

1.2 Has a ground-water monitoring system been established? (Y/N) Y

1.2.1 Is a ground-water quality assessment program outlined or proposed? (Y/N) Y

If Yes,

1.2.2 Was it reviewed prior to the site visit? (Y/N) N/A
A site inspection was not conducted as part of this review.

1.3 Has a ground-water quality assessment program been implemented or proposed at the site? (Y/N) Y

If yes, Appendix C, Ground-Water Quality Assessment Program Technical Information Form must be utilized also.

2.0 Regional/Facility Map(s)

2.1 Is a regional map of the area, with the facility delineated, included? See facility's Permit Application (Nov. 12, 1983) (Y/N) Y

If yes,

2.1.1 What is the origin and scale of the map? Origin unknown, Scale 1:24000

2.1.2 Is the surficial geology adequately illustrated? (Y/N) Y

2.1.3 Are there any significant topographic or surficial features evident? (Y/N) Y

If yes, describe There is a lake approx. 700' SW of property; Huffman Creek flows southeastward approx. 1000' south of property; Red River flows east-southeastward approx. 3000' south of the site. Fault zone located seven miles west of the site

2.1.4 Are there any streams, rivers, lakes, or wet lands near the facility? (Y/N) Y

If yes, indicate approximate distances from the facility See 2.1.3

2.1.5 Are there any discharging or recharging wells near the facility? (Y/N) Y

If yes, indicate approximate distances from the facility. There are numerous water wells within a 2 mile radius of the site.

2.2 Is a regional hydrogeologic map of the area included? (This information may be shown on 2.1) (Y/N) N

If yes:

2.2.1 Are major areas of recharge/dishcarge shown? (Y/N) N/A

If yes, describe.

2.2.2 Is the regional ground-water flow direction indicated? (Y/N) N/A

2.2.3 Are the potentiometric contours logical? (Y/N) N/A
If not, explain.

2.3 Is a facility plot plan included? See facility's Nov. 12, 1983 Permit Application (Y/N) Y

2.3.1 Are facility components (landfill areas, impoundments, etc.) shown? (Y/N) Y

2.3.2 Are any seeps, springs, streams, ponds, or wetlands indicated? (Y/N) Y

2.3.3 Are the locations of any monitoring wells, soil borings, or test pits shown? (Y/N) Y

2.3.4 Is the facility a multi-component facility? (Y/N) N

If yes:

2.3.4.1 Are individual components adequately monitored? (Y/N) N/A

2.3.4.2 Is a Waste Management Area delineated? (Y/N) N/A

2.4 Is a site water table (potentiometric) contour map included? See facility's Part B permit applicatn (Y/N) Y

If yes,

2.4.1 Do the potentiometric contours appear logical based on topography and presented data? (Consult water level data) (Y/N) Y

2.4.2 Are groundwater flowlines indicated? (Y/N) N

2.4.3 Are static water levels shown? (Y/N) N

2.2.4 May hydraulic gradients be estimated? (Y/N) Y

2.4.5 Is at least one monitoring well located hydraulically upgradient of the waste management area(s)? (Y/N) Y

2.4.6 Are at least three monitoring wells located hydraulically downgradient of the waste management area(s)? (Y/N) Y

2.4.7 By their location, do the upgradient wells appear capable of providing representative ambient groundwater quality data? (Y/N) Y

If no, explain. _____

_____

_____

See Groundwater Assessment Plan - Final Report (by Ball Eng., Inc. July 20, 1984) and Site inspection checklist of 11/14/83

3.0 Soil Boring/Test Pit Details

3.1 Were soil borings/test pits made under the supervision of a qualified professional? (Y/N) Y

If yes,

3.1.1 Indicate the individual(s) and affiliation(s): N J. Gorsha Jr., P.E., Geotechnical Testing Lab Inc. of Alexandria, LA

3.1.2 Indicate the drilling/excavating contractor, if known Lee Well Drilling, Alexandria, LA

3.2 If soil borings/test pits were made, indicate the method(s) of drilling/excavating:

- Auger (hollow or solid stem) ✓ (truck mounted)
- Mud rotary
- Air rotary
- Reverse rotary
- Cable tool
- Jetting
- Other, including excavation (explain)

3.3 List the number of soil borings/test pits made at the site

3.3.1 Pre-existing 0

3.3.2 For RCRA compliance 7 (total)

3.4 Indicate borehole diameters and depths (if different diameters and depths use TABLE B-1). (Per 11/14/83 Site inspection checklist also Final Ground-Water Assessment Report)

3.4.1 Diameter: Boring 1, 2, 3 = 4"; Boring 4 = 8"; Observation Boring 1 = 2"; Obsev. Boring 2 = 2"

3.4.2 Depth: Boring 1 = 40 ft.; Boring 2+3 = 30 ft.; Observation Boring 1 = 6.2'; Obsev. Boring 2 =

3.5 Were lithologic samples collected during drilling? (Y/N) Y

If yes,

3.5.1 How were samples obtained? (Check method(s))

- Split spoon
- Shelby tube, or similar ✓
- Rock coring
- Ditch sampling
- Other (explain)

INFORMATION TABLE B-1

BORING NO.	DEPTH	DIAMETER

3.5.2 At what interval were samples collected? Approx. every 5 feet

3.5.3 Were the deposits or rock units penetrated described? (boring logs, etc.) (Y/N) Y

3.6 If test pits were excavated at the site, describe procedures. N/A

4.0 **Well Completion Detail** See Ground-Water Assessment Plan - Final Report (July 20, 1984)

4.1 Were the wells installed under the supervision of a qualified professional? (Y/N) Y

If yes:

4.1.1 Indicate the individual and affiliation, if known Lee Drilling of Alexandria, LA.

4.1.2 Indicate the well construction contractor, if known Lee Drilling of Alexandria, LA

4.2 List the number of wells at the site

4.2.1 Pre-existing Unknown

4.2.2 For RCRA Compliance 3 (originally), 4 additional for assessment of ground water quality and to delineate extent of contamination (two of these are observation wells)

4.3 Well construction information (fill out INFORMATION TABLE B-2)

4.3.1 If PVC well screen or casing is used, are joints (couplings):

- Glued on ✓
- Screwed on

4.3.2 Are well screens sand/gravel packed? (Y/N) N

* Replaced original well #3, which was removed from service

INFORMATION TABLE B-2

	WELL NO.	1	2	3*	4		
	GROUND ELEVATION (MSL)	97.9'	93'	92.6'	82'		
	TOTAL DEPTH	55'	58'	59'	58'		
WELL CASING	TYPE MATERIAL	PVC	PVC	PVC	PVC		
	DIAMETER	4"	4"	4"	4"		
	LENGTH	47.1'	49.2'	50.4'			
	STICK-UP	2.1'	1.2'	1.4'	2'		
	TOP ELEVATION	100'	94.2'	94'	84'		
	BOTTOM ELEVATION	52.9'	45'	43.6'			
WELL SCREEN	DEPTH TOP/BOTTOM	45'/55'	48'/58'	49'/59'			
	TYPE MATERIAL	PVC	PVC	PVC	PVC		
	DIAMETER	4"	4"	4"	4"		
	LENGTH	10'	10'	10'	10'		
	SLOT SIZE	0.01"	0.01"	0.01"			
	TOP ELEVATION	52.9'	45'	43.6'			
	BOTTOM ELEVATION	42.9'	35'	33.6'			
OPEN HOLE OR SAND/GRAVEL PACK	DEPTH TOP/BOTTOM						
	DIAMETER						
	LENGTH						
	TOP ELEVATION						
	BOTTOM ELEVATION						

Additional monitoring and observation well construction details are not available.

4.3.3 Are annular spaces sealed? (Y/N) Y

If yes, describe:

- bentonite slurry
- Cement grout ✓
- Other (explain) _____

_____

- Thicknesses of seals _____

4.3.4 If "open hole" wells, are the cased portions sealed in place? (Y/N) N/A

If yes, describe how: _____

_____

_____

4.3.5 Are there cement surface seals? (Y/N) Y

If yes,

- How thick? Not specified

4.3.6 Are the wells capped? (Y/N) Y

If yes,

- Do they lock? (Y/N) Y

4.3.7 Are protective standpipes cemented in place? (Y/N) Y

4.3.8 Were wells developed? (Y/N) Unknown - no records

If yes, check appropriate method(s):

- Air lift pumping
- Pumping and surging
- Jetting
- Bailing
- Other (explain)

_____

5.0 Aquifer Characterization See Nov. 11, 1983 Permit Application

5.1 Has the extent of the uppermost saturated zone (aquifer) in the facility area been defined? (Y/N) Y

If yes,

5.1.1 Are soil boring/test pit logs included? (Y/N) Y

5.1.2 Are geologic cross-sections included? (Y/N) Y

5.2 Is there evidence of confining (low permeability) layers beneath the site? (Y/N) Y

If yes,

5.2.1 Is the areal extent and continuity indicated? (Y/N) N

5.2.2 Is there any potential for saturated conditions (perched water) to occur above the uppermost aquifer? (Y/N) Unknown

If yes, give details: _____

a) Should or is this perched zone being monitored? (Y/N) Unknown

Explain _____

5.2.3 What is the lithology and texture of the uppermost saturated zone (aquifer)? Sand

5.2.4 What is the saturated thickness, if indicated? Not indicated

5.3 Were static water levels measured? (Y/N) Y

If yes,

5.3.1 How were the water levels measured (check method(s)).

- Electric water sounder ✓
- Wetted tape
- Air line
- Other (explain)

5.3.2 Do fluctuations in static water levels occur? (Y/N) N

If yes,

5.3.2.1 Are they accounted for (e.g. seasonal, tidal, etc.)? (Y/N) N/A

If yes, describe: _____

5.3.2.2 Do the water level fluctuations alter the general ground-water gradients and flow directions? (Y/N) N/A

If yes,

5.3.2.3 Will the effectiveness of the wells to detect contaminants be reduced? (Y/N) N/A

Explain _____

5.3.2.4 Based on water level data, do any head differentials occur that may indicate a vertical flow component in the saturated zone? (Y/N) N

If yes, explain _____

5.4 Have aquifer hydraulic properties been determined? (Y/N) Y

If yes, See Groundwater Assessment Plan - Final Report (July 20, 1984)

5.4.1 Indicate method(s):

- Pumping tests
- Falling/constant head tests
- Laboratory tests (explain) ✓ ✓ Atterburg limits

5.4.2 If determined, what are the values for:

- Transmissivity
- Storage coefficient
- Leakage
- Permeability ✓ Range from 9×10^{-4} cm/sec to 1×10^{-4} cm/sec.
- Porosity
- Specific capacity

5.4.3 In cases where several tests were undertaken, were discrepancies in the results evident? (Y/N) _____

If yes, explain _____

5.4.4 Were horizontal ground-water flow velocities determined? (Y/N) Y

If yes, indicate rate of movement Approx 2 ft./year (estimate based on average permeability value)

6.0 Well Performance

6.1 Are the monitoring wells screened in the uppermost aquifer? (Y/N) Y

6.1.1 Is the full saturated thickness screened? (Y/N) N

6.1.2 For single completions, are the intake areas in the: (check appropriate levels)

- Upper portion of the aquifer
- Middle of the aquifer ✓
- Lower portion of the aquifer

6.1.3 For well clusters, are the intake areas open to different portions of the aquifer? (Y/N) N/A

6.1.4 Do the intake levels of the monitoring wells appear to be justified due to possible contaminant density and groundwater flow velocity? (Y/N) Y

7.0 Ground-Water Quality Sampling See facility's Permit Application of Nov. 11, 1983

7.1 Is a sampling (groundwater quality) program and schedule included? (Y/N) Y

7.2 Are sample collection field procedures clearly outlined? (Y/N) N

7.2.1 How are samples obtained: (check method(s))

- Air lift pump
- Submersible pump ✓
- Positive displacement pump ✓
- Centrifugal pump
- Peristaltic or other suction-lift pump
- Bailer
- Other (describe) Applicant indicates that samples will be obtained using either a submersible pump, positive displacement pump, or other means to obtain representative samples.

7.2.2 Are all wells sampled with the same equipment and procedures? (Y/N) Unknown

If no, explain Not specified in the sampling + analysis plan

7.2.3 Are adequate provisions included to clean equipment after sampling to prevent cross-contamination between wells? (Y/N) Unknown

7.2.4 Are organic constituents to be sampled? (Y/N) N

If yes,

7.2.4.1 Are samples collected with equipment to minimize absorption and volatilization? (Y/N) N/A

If yes,

Describe equipment _____

_____

_____

8.0 Sample Preservation and Handling — See Sampling + Analysis Plan, also see Feb 12, 198. letter from John Ball to Colfax instructing Colfax Personnel in sampling + shipment methods.

8.1 Have appropriate sample preservation and preparation procedures been followed (filtration and preservation where appropriate)? (Y/N) Y (After sampling only)

8.2 Are samples refrigerated? (Y/N) Y

8.3 Are EPA recommended sample holding period requirements adhered to? (Y/N) * Unknown (* Probably not, as samples shipped to lab via Greyhound)

8.4 Are suitable container types used? (Y/N) Y

8.5 Are provisions made to store and ship samples under cold conditions (ice packs, etc.)? (Y/N) N

8.6 Is a chain of custody control procedure clearly defined? (Y/N) N (See S-7.1)

8.7 Is a specific chain of custody form illustrated? (Y/N) Y

If yes,

8.7.1 Will this form provide an accurate record of sample possession from the moment the sample is taken until the time it is analyzed? (Y/N) N (Chain-of-custody control during shipping not included)

9.0 Sample Analysis and Record Keeping

9.1 Is sample analysis performed by a qualified laboratory? (Y/N) Y

Indicate lab Savannah Labs, Inc. + Ball Engineering, Inc.

9.2 Are analytical methods described in the records? (Y/N) Y

9.2.1 Are analytical methods acceptable to EPA? (Y/N) Y

9.3 Are the required drinking water suitability parametters tested for? (Y/N) N (Most parameters were not tested for during the first year)

9.4 Are the required groundwater quality parameters tested for? (Y/N) Y (During 2nd quarter of first year, however analysis only for phenols)

9.5 Are the required groundwater contamination indicator parameters tested for? (Y/N) N (During first yr of monitoring, analyzed only for pH and Spec. Cond.)

9.6 Are any analytical parameters determined in the field? (Y/N) Y

Identify:

- pH
- Temperature
- Specific conductance ✓
- Other (describe) _____

_____

9.7 Is a plan included to record information about each sample collected during the groundwater monitoring program? (Y/N) Y

9.7.1 Are field activity logs included? (Y/N) Y

9.7.2 Are laboratory results included? (Y/N) N

9.7.3 Are field procedures recorded? (Y/N) Y

9.7.4 Are field parameter determinations included? (Y/N) Y (temperature only)

9.7.5 Are the names and affiliation of the field personnel included? (Y/N) Y

9.8 Are statistical analyses planned or shown for all water quality results where necessary? (Y/N) Y

9.8.1 Is an analysis program set-up which adheres to EPA guidelines? (Y/N) Y

9.8.2 Is Student's t-test utilized? (Y/N) Y
If other evaluation procedure used, identify _____

_____

9.8.3 Are provisions made for submitting analysis reports to the Regional Administrator? (Y/N) Y

10.0 Site Verification Per 11/14/83 site inspection checklist

10.1 Plot Plan indicating the locations of various facility components, ground-water monitoring wells, and surface waters? (Y/N) Y

10.1.1 Is the plot plan used for the inspection the same as in the monitoring program plan documentation? (Y/N) Y

If not, explain _____

_____

10.1.2 Are all of the components of the facility identified during the inspection addressed in the monitoring program documentation? (Y/N) Y

If not, explain _____

10.1.3 Are there any streams, lakes or wetlands on or adjacent to the site? (Y/N) Y

If yes, indicate distances from waste management areas _____
Stream immediately adjacent to impoundment

10.1.4 Are there any signs of water quality degradation evident in the surface water bodies? (Y/N) N

If yes, explain _____

10.1.5 Is there any indication of distressed or dead vegetation on or adjacent to the site? (Y/N) N

If yes, explain _____

10.1.6 Are there any significant topographic or surficial features on or near the site (e.g., recharge or discharge areas)? (Y/N) N

If yes, explain _____

10.1.7 Are the monitor well locations and numbers in agreement with the monitoring program documentation? (Y/N) Y

If no, explain _____

10.1.7.1 Were locations and elevations of the monitor wells surveyed into some known datum? (Y/N) Y

If not, explain John Ball apparently used a USGS contour map to locate a 100' contour line near the railroad track. As the railroad track is near the monitoring well sites, Ball used the 100' elevation as the baseline datum.

10.1.7.2 Were the wells sounded to determine total depth below the surface? (Y/N) Y

If not, explain _____

_____

10.1.7.3 Were discrepancies in total depth greater than two feet apparent in any well? (Y/N) N

If yes, explain _____

_____

10.1.8 Was ground water encountered in all monitoring wells? (Y/N) Y

If not, indicate which well(s) were dry _____

_____

10.1.9 Were water level elevations measured during the site visit? (Y/N) _____

If yes, indicate well number and water level elevation _____

_____

If not, explain _____

_____

APPENDIX C

GROUND-WATER QUALITY ASSESSMENT PROGRAM
INFORMATION FORM

Company Name: Colfax Creosoting Co. ; EPA I.D.#: LAD008184616
Company Address: P.O. Box 231
Pineville, LA
71360
Reviewer's ~~Inspector's~~ Name: E. Fernandez-Obregon ; Date: 9/10/84

1.0 Background

1.1 List the constituents (contaminants) originating from the waste management area: (use separate sheet if necessary) Creosote

1.2 Have the concentrations of the hazardous waste or hazardous waste constituents shown significant increases in:

- upgradient monitoring wells (Y/N) Y
- downgradient monitoring wells (Y/N) Y

1.2.1 List or indicate on a map, the wells which have shown significant increases: (use separate sheet if necessary) For Feb. 2, 1984 sampling round: all wells showed pH increases; well 3 showed increase in specific conductance. Also, TOX values in all wells were higher than background levels.

1.3 Were the significant increases in contaminant concentration determined through the use of the student's t-Test? (Y/N) Y

If no,

1.3.1 Explain procedure used

1.4 Has the possibility of error (e.g., laboratory) been eliminated? (Y/N) N

1.4.1 Explain Additional samples (collected, split in two, etc.) were never obtained to verify the initial results.

2.0 Contaminant Characteristics

2.1 If available, list the chemical and physical properties of the contaminants which have been detected in the ground water: (density, solubility, etc.). Include on a separate sheet if list is extensive Not available in reports; however, the Creosote has a high specific gravity.

3.0 Implementation of the Assessment Program

3.1 Has the extent of the migration of hazardous waste or hazardous waste constituents been determined? (Y/N) Y

If yes,

3.1.1 Indicate how: (check appropriate method(s))

- additional ground-water monitoring wells ✓
- geophysical methods
- computer simulation
- other, explain

3.2 Were monitoring wells installed? (Y/N) Y

If yes,

3.2.1 Record monitoring well/peizometer completion data on INFORMATION TABLE C-1. See Table B-1 for available information on monitoring wells.

3.2.2 Were well clusters (nests) used or were wells with multiple intake areas constructed? Give details No

3.2.3 Show the numbers and locations of the additional wells/peizometers on a site map. Not available in the State records.

3.2.4 Are the locations of the wells/piezometers justified in view of the water table or potentiometric surface map? (Y/N) Y * (Locations of original wells are adequate)
Give details * However, the locations of the additional observation wells are not delineated on any map; hence, the adequacy of the locations of these wells could not be determined.

INFORMATION TABLE C-1

	WELL NO.						
	GROUND ELEVATION						
	TOTAL DEPTH						
WELL CASING	TYPE MATERIAL						
	DIAMETER						
	LENGTH						
	STICK-UP						
	TOP ELEVATION						
	BOTTOM ELEVATION						
WELL SCREEN	DEPTH TOP/BOTTOM						
	TYPE MATERIAL						
	DIAMETER						
	LENGTH						
	SLOT SIZE						
	TOP ELEVATION						
	BOTTOM ELEVATION						
OPEN HOLE OR SAND/GRAVEL PACK	DEPTH TOP/BOTTOM						
	DIAMETER						
	LENGTH						
	TOP ELEVATION						
	BOTTOM ELEVATION						

3.2.5 Are the depths of the monitoring wells/ piezometers justified due to the relative characteristics (e.g., densities) of the contaminants? (Y/N) Y
Give details The monitoring wells are screened at the lower portion of the aquifer because Creosote's specific gravity is greater than that of water.

3.2.6 List any other methods (e.g., soil sample analysis) used to document the extent of the contamination. (use separate sheet if necessary) None

3.3 Has the rate of contaminant migration been determined? (Y/N) N

If yes, what is it and how was it determined? The rate of ground-water movement has been determined (calculated); however the rate of creosote migration will be different since its specific gravity is higher than that of water.

3.3.1 Does the rate of migration differ for various contaminants? (Y/N) N/A
Give details The contaminant of Concern is Creosote.

3.3.2 If known, what is the cause (reason) of (for) this differential in migration rates? N/A

LAD008184616

Enforcement file - Inspection

JFB 12/27/83

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: 12/20/83

SUBJECT: Transmittal Memo - Compliance Monitoring Inspection Report

FROM: Holly Ardeson (Inspector)

TO: Dave Peters, Chief
Hazardous Waste Section (6ES-SH)

Reviewed by Reynolds Davis 12-30-83

A compliance monitoring inspection was conducted on 11/14/83 Date(s)

at the following location:

Name: Colfax Creosoting

Address: Pineville LA

EPA I.D. Number: LAD008184616 NPDES Permit No. _____

Type of inspection: Joint (✓) Lead ( )
Type of facility: Federal ( ) Municipal ( ) Nonmunicipal (✓)

Compliance Monitoring Reports Attached: TSCA ( ) RCRA (✓)

Comments:

Photographs and photo log sent as addendum to report transmitted 11/22/83.

EPA Form 1320-6 (Rev. 3-76)

COLFAX CREOSOTING
LAD008184616

Photo log

photo #1 monitoring well #1
#2 monitoring well #2
#3 monitoring well #3
#4 close-up of monitoring well #3

} examples of monitoring wells showing locked caps, equipment guards, concrete pads (photo 4 shows how we dug away dirt to expose concrete pad

photo #5 security sign at impoundment

photo #6
#7
#8
#9
#10
#11

} series of photos taken along one side of impoundment from far left to far right, showing entire impoundment

photo #12 This photo was taken near pump station at the impoundment to show a break in security along the fence line; facility says the fence is open here to allow service personnel access to the pump and the piping. This could possibly allow unauthorized access to the pond.

photo #13 process area photo showing dirt work in process — beginning work on concreting process areas

photo #14 process tanks

photo #15 process tank – this shows an example of new retainer walls being built around process tanks

CAD 008 184 616 File W.U. (11)

1. Are wells in place? If not, why not?	YES
2. Are the wells adequate? If not, why not?	YES
3. Anticipated dates of new well construction	None
4. Date of directives to company to modify existing (265) system (including inadequate waiver directives)	NOD 12-26-84
5. Dates of directives to company to modify 264 system	None
6. Is there a plan in house which needs to be reviewed (265, 264)? Date granted, if applicable	NO
7. Groundwater compliance actions taken to date (e.g., Notice of Violation, 3008 order, 3013 order, referral to Department of Justice or Attorney General (if state). Indicate the date of any such action.	A.O. 10-7-83 OUT CLASS II A.O. 1-5-84 (CC/PC) CLASS II A.O. 10-26-84 OUT - ON SCHEDULE DUE 1-24-85
8. Has facility ever taken waste from Superfund site? If so, when?	No
9. What actions are planned during the remainder of Fiscal year 1985?	NONE
10. Date of anticipated or actual Part B receipt (indicate date first received and date completed)	10-10-84
11. Date of last EPA inspection	None
12. Date of last state inspection	11-14-83
13. Approximate date of scheduled EPA inspection	Not Scheduled
14. Date company plans to close	1994
15. Date hazardous waste ceased to be accepted	
16. Date of approval of closure plan	
17. Date of Certification of Closure	
18. A significant increase parameter filed? If so, when?	YES 10/7/83
19. In assessment? If so, report filed? If so, when?	YES YES 1/5/84
20. Any indication that any unit has discharged/released HW constituents? If so, corrective action initiated?	YES NO

George H. Cramer
Dick Whittington

Inspector in City file

12/15/83 12/7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: 11/21/83

SUBJECT: Transmittal Memo - Compliance Monitoring Inspection Report

Rec'd Enf 11/22/83 LAD008184616

FROM: Holly Anderson (Inspector)

TO: Dave Peters, Chief
Hazardous Waste Section (6ES-SH)

Holly Anderson
Reviewed by
11/22/83

A compliance monitoring inspection was conducted on 11/14/83
Date(s)

at the following location:

Name: Colfax Creosoting Company

Address: POBox 231 Wadley Road Pineville LA 71360

EPA I.D. Number: LAD008184616 NPDES Permit No. _____

Type of inspection: Joint (X) Lead ( )
Type of facility: Federal ( ) Municipal ( ) Nonmunicipal (X)

Compliance Monitoring Reports Attached: TSCA ( ) RCRA (X)

Comments:

No groundwater monitoring water levels were taken during this inspection. State/facility personnel were not prepared and EPA equipment was not available yet.

Photographs were taken and will be forwarded as an addendum after developing.

EPA Form 1320-6 (Rev. 3-76)

DATE: 11/22/83

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SUBJECT: RCRA Compliance Monitoring Inspection Reports

FROM: David Peters, Chief D Peters
Hazardous Waste Section (6ES-SH)

TO: Gerald Fontenot, Chief
Enforcement Section (6AW-HE)

The attached RCRA Compliance Monitoring Inspection Reports have been prepared and reviewed by Environmental Services (6ES) and are being forwarded to you for your information and action.

Facility	EPA I.D. No.	Apparent Violation	
		Yes	No
COLFAX CREOSOTING CO.	LAD008184616	✓	

The following attachments are included in this report:

1. closure plan
2. gw quality assessment plan outline
3. regional site map
4. site contour map
5. regional water wells map + info.
6. site well map
7. boring hole map
8. subsurface investigation packet
9. boring hole logs and test results
10. sampling plan

Note: Copies of these attachments will not be kept in Env. Services Div

EPA Form 1320-6 (Rev. 3-76)

5/19/83

RCRA INSPECTION

I. SITE IDENTIFICATION

LAD008184616

A. Site Name: Colfax Creosoting Company

B. Street (or other identifier): PO Box 231 Wadley Road

C. City: Pineville

D. State: LA

E. Zip Code: 71360

F. County Name:

G. Site Operator Information

1. Name: Roy O. Martin Lumber Company

2. Telephone Number: 318-442-2467

3. Street: PO Box 1110

4. City: Alexandria

5. State: LA

6. Zip Code: 71301

H. Site Description: pole treating - surface impoundment

I. Latitude (deg.-min.-sec.)

Longitude (deg.-min.-sec.)

J. Type of Ownership

__1. Federal __2. State __3. County __4. Municipal X 5. Private

K. X 1. Generator __2. Transporter __3. Treatment X 4. Storage __5. Disposal

INSPECTION INFORMATION

A. Principal Inspector Information

1. Name: Tom Patterson

2. Title: Env. Protection Specialist

3. Organization: LA DNR

4. Telephone No. (area code & No.): 504-342-1227

B. Inspection Participants

Holly Anderson - EPA

Clyde Norton - Colfax

Carl Johnson - Colfax

John Ball - Engineering Consultant to Colfax

Revised 7/82

RCRA COMPLIANCE INSPECTION REPORT
GENERATORS CHECKLIST

Note: On multiple part questions, circle those not in compliance.

Section A - EPA Identification No.

1. Does Generator have EPA I.D. No.? (262.12 - EPA I.D. No.) ✓ Yes ___ No

   a. If yes, EPA I.D. No. LAD008184616

Section B - Hazardous Waste Determination

1. Does generator generate hazardous waste(s) listed in Subpart D (261.30 - 261.33 - List of Hazardous Waste)? ✓ Yes ___ No

   a. If yes, list wastes and quantities ~~on attachment~~ (Include EPA Hazardous Waste No.) (Provide waste name and description.) K001 - Bottom sediment sludge from the treatment of wastewaters from wood preserving with creosote or pentachlorophenol (T)

2. Does generator generate solid waste(s) that exhibit hazardous characteristics? (corrosovity, ignitability, reactivity, EP toxicity) (261.20 - 261.24 - Characteristics of Hazardous waste.)

   ___ Yes ✓ No

   a. If yes, list wastes and quantities on attachment. (Include EPA Hazardous Waste No.) (Provide waste name and description) N/A

   b. Does generator determine characteristics by testing or by applying knowledge of processes? _____

      1. If determined by testing, did generator use test methods in Part 261, Subpart C (or Equivalent)? ___ Yes ___ No

      2. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes deemed non-hazardous generated by generators? i.e.(process waste streams, collected matter from air pollution control equipment, water treatment sludge, etc.)

   ___ Yes ✓ No

   a. If yes, did generator determine non-hazardous characteristics by testing or knowledge of process? _____ N/A

      1. If determined by testing, did generator use test methods in Part 261, Subpart C (or Equivalent)? ___ Yes ___ No

      2. If equivalent test methods used, attach copy of equivalent methods used.

   b. List wastes and quantities deemed non-hazardous or processes from which non-hazardous wastes were produced. (Use narrative explanations sheet.)

Section C - Manifest

1. Does generator ship hazardous waste off-site? (Subpart B - The Manifest) ___ Yes ✓ No

   a. If no, do not fill out Section C and D.

   b. If yes, identify primary off-site facility(s). Use narrative explanations sheet.)

2. Has generator shipped hazardous waste off-site since November 19, 1980? ___ Yes ___ No

3. Is generator exempted from regulation because of:

   Small quantity generator (261.5 - Special requirements)

   OR ___ Yes ___ No

   Produces non-hazardous waste at this time (261.4 - Exclusions) ___ Yes ___ No

4. If not exempted does generator use manifest? (262.20 - General requirements) ___ Yes ___ No

   a. If yes, does manifest include the following information (262.21 - Required information) (Break up items or circle ones not on manifest)

      1. Manifest Document No. ___ Yes ___ No
      2. Generators Name, Mailing Address, Tele. No. ___ Yes ___ No
      3. Generator EPA I.D. No. ___ Yes ___ No
      4. Transporter(s) Name and EPA I.D. No. ___ Yes ___ No
      5. a. Facility Name, Address and EPA I.D. No. ___ Yes ___ No
      6. DOT description of the waste ___ Yes ___ No
      7. a. Quantity (weight or volume) ___ Yes ___ No
         b. Containers (type and number) ___ Yes ___ No
      8. Emergency Information (optional) (special handling instructions, Phone No.) ___ Yes ___ No

N/A

N/A

9. Is the following certification on each manifest form? ____ Yes ____ No

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

5. Does generator retain copies of manifests? ____ Yes ____ No

(Check completed manifests at random. Indicate how many manifests were inspected, how many violations were noted and the type of violation.)

If yes, complete a through e. If questions contain more than one item, circle those not in compliance. (263.23 Use of the Manifest)

a. (1) Did generator sign and date all manifests inspected? ____ Yes ____ No
(2) Who signed for generator? Name _____ Title _____

b. (1) Did generator obtain handwritten signature and date of acceptance from initial transporter? ____ Yes ____ No
(2) Who signed and dated for transporter? Name _____ Title _____

c. Does generator retain one copy of manifest signed by generator and transporter? ____ Yes ____ No

d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? ____ Yes ____ No

e. If copy of manifest from facility was not returned within 45 days, did generator file an exception report? (262.42 - Exception reporting) ____ Yes ____ No

(1) If yes, did it contain the following information

Legible copy of manifest ____ Yes ____ No
AND
Cover letter explaining generators efforts to locate waste. ____ Yes ____ No

f. Does (will) generator retain copies for 3 years? ____ Yes ____ No

Section D - Pre-Transport Requirements

1. Does generator package waste? ____ Yes ✓ No

   If no, skip the rest of Section D.
   If yes, complete the following questions.

N/A

2. Does generator package waste in accordance with 49 CFR 173 178, and 179? (DOT requirements) (262.30 - Packaging) ____ Yes ____ No

3. Inspect containers to be shipped.
   a. Are containers to be shipped leaking or corroding or bulging? ____ Yes ____ No
   b. Use narrative explanations sheet to describe containers and condition.
   c. Is there evidence of heat generation from incompatible wastes in the containers? ____ Yes ____ No

4. Does the generator use DOT labeling requirements in accordance with 49 CFR 172? (262.31 - Labeling) ____ Yes ____ No

5. Does the generator mark each package in accordance with 49 CFR 172? (262.32 - Marking) ____ Yes ____ No

6. Is each container of 110 gallons or less marked with the following label? (262.32 - Marking) ____ Yes ____ No

   Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

   Generator's Name and Address _____

   _____

   Manifest Document Number _____

7. If there are any vehicles present on site loading or unloading hazardous waste, inspect for presence of placards. Note this instance on narrative explanation sheet.

N/A

8. Accumulation Time (262.34 - Accumulation Time)
   a. Is facility a permitted storage facility? ____ Yes ____ No

   If yes, skip to question #9.
   If no, answer rest of question #8.

   b. Is hazardous waste shipped offsite within 90 days? ____ Yes ____ No

   c. Are containers used to store waste? ____ Yes ____ No

      (1) Is the beginning date of accumulation time clearly indicated? ____ Yes ____ No

N/A

N/A

c. (1) Does generator inspect containers for leakage or corrosion? (265.174 - Inspections) ___ Yes ___ No

(2) If yes, with what frequency? _____

d. (1) Does generator handle ignitable or reactive waste? ___ Yes ___ No

(2) If yes, does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) inside facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) ___ Yes ___ No

NOTE: If generator accumulates waste on-site for less than 90 days, fill out Facilities Checklist Section A—#9 Personnel Training; Section B - Preparedness and Prevention; and Section C - Contingency Plan and Emergency Procedures.

9. Describe storage area. Use photos and narrative explanation sheet.

Section E - Recordkeeping and Records

1. Is generator keeping the following reports? (262.40 - Recordkeeping) (Note: The following must be kept for a minimum of three (3) years.)

a. Manifests and signed copies from designated facilities? N/A
b. Annual reports (Not applicable until March 1982) ___ Yes ___ No
c. Exception Reports ✓ Yes ___ No
d. Test results where applicable. ___ Yes ___ No N/A
✓ Yes ___ No

2. Where are records kept (at facility or elsewhere)? at facility

3. Who is in charge of keeping the records? Name Clyde Norton Title Vice President

Section F - Special Condition

1. Has generator received from or transported to a foreign source any hazardous waste? (262.50 - International Shipments) ___ Yes ✓ No

If yes, N/A

a. Has he filed a notice with the R.A.? ___ Yes ___ No
b. Is this waste manifested and signed by Foreign Consignee? ___ Yes ___ No
c. If generator transported wastes out of the country has he received confirmation of delivered shipment? ___ Yes ___ No

Revised 7/82

RCRA COMPLIANCE INSPECTION REPORT
TSD FACILITIES CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.? (265.11 - Identification Number) ✓ Yes ___ No

   A. If yes, EPA I.D. No. LAD008184616
   If no, explain _____

2. Has facility received hazardous waste from a foreign source? (265.12 - Required notices) ___ Yes ✓ No

   A. If yes, has he filed a notice with the Reg. Admin. ___ Yes ___ No N/A.

Waste Analysis

3. Does the facility have a written waste analysis plan? (265.13 - General Waste Analysis) ✓ Yes ___ No

   A. If yes, is a copy maintained at the facility? ✓ Yes ___ No

   B. If no, question #4 not applicable.

4. If yes, does it include:

   A. Parameters for which each waste will be analyzed? ✓ Yes ___ No

   B. Test methods used to test for these parameters? ✓ Yes ___ No

   C. Sampling method used to obtain sample? ✓ Yes ___ No

   D. Frequency with which the initial analysis will be reviewed or repeated? ✓ Yes ___ No

      1. If yes, does it include requirements to re-test when the process or operation generating the waste has changed? ✓ Yes ___ No

   E. (For off-site facilities) Waste analyses that generators have agreed to supply? ___ Yes ___ No N/A

   F. (For off-site facilities) Procedures which are used to inspect and analyze each movement of hazardous waste including: N/A

      1. Procedures to be used to determine the identity of each movement of waste? ___ Yes ___ No

      2. Sampling method to be used to obtain representative sample of the waste to be identified? ___ Yes ___ No

5. Does the facility provide adequate security to minimize the possibility for the unauthorized entry of persons or livestock onto the active portions of the facility? (265.14 - Security) See below
___ Yes ___ No

If no, describe inadequacies. (Use narrative explanations sheet.)

If yes, is security provided through:

A. 24-hour surveillance system? (e.g. television monitoring or guards) ___ Yes ✓ No
Note: there are personnel working on the site, but not continuously in impoundment area - roving guards come on duty in the evening
OR

B. 1. Artificial or natural barrier around facility (e.g. fence or fence and cliff)? ✓ Yes ___ No
Describe type of security
3-strand fence around impoundment - fence is not continuous - there is an opening in the fence at the pump station
AND

2. Means to control entry through entrances (e.g. attendant, television monitors, locked entrance, controlled roadway access)? ___ Yes ___ No
Describe type of security.
entire plant is open - fence around impoundment does not have gates, only opening at pump mentioned above; this does not have lock
Include a drawing indicating any inadequacies in the facility's security system..

6. Is a sign with the legend, "Danger-Unauthorized Personnel Keep Out," posted at the entrance to the active portion of the facility? (265.14 - Security) ✓ Yes ___ No

Is it written in English and legible from at least 25 feet? ✓ Yes ___ No

(NOTE: The sign must be written in any other language predominant in the area surrounding the facility (e.g. In New Mexico and Texas areas bordering Mexico, the sign must be in Spanish).

If an existing sign with a legend other than "Danger-Unauthorized Personnel Keep Out," what does that legend say? N/A

_____

_____

General Inspection Requirements

7. A. Does the owner/operator maintain a written schedule for inspecting: (265.25 - General Inspection Requirements)

1. Monitoring equipment? (If applicable) (wells) ✓ Yes ___ No
2. Safety and emergency equipment? ✓ Yes ___ No
3. Security devices? ✓ Yes ___ No
4. Operating and structural equipment (if applicable) ___ Yes ___ No N/A
5. Does the schedule or plan identify the types of problems to be looked for during inspection? ✓ Yes ___ No

   a. Malfunction or deterioration (e.g. inoperative sump pump, leaking fitting, eroding dike, corroded pipes or tanks, etc.) ✓ Yes ___ No

   b. Operator error ___ Yes ___ No N/A

   c. Discharges (e.g. leaks from valves or pipes joint breaks, etc.) ✓ Yes ___ No

B. Is a written schedule for these inspections maintained at the facility? ✓ Yes ___ No

   1. Are these inspections conducted? ✓ Yes ___ No

      a. Is a record of these inspections maintained in the inspection log? ✓ Yes ___ No

8. Does the owner/operator have an inspection log? (265.15 - General Inspection Requirements) ✓ Yes ___ No

A. If yes, does it include:

   1. Date and time of inspection? ✓ Yes ___ No
   2. Name of inspector? (initials) ✓ Yes ___ No
   3. Notation of observations? ✓ Yes ___ No
   4. Date and nature of repairs or remedial action? ✓ Yes ___ No

B. Are there any malfunctions or other deficiencies noted in the inspection log that remain uncorrected? (Use narrative explanation sheet). ___ Yes ✓ No

C. Are records of the inspection log maintained at the facility for three (3) years? ✓ Yes ___ No

Training is in the form of discussions held in the field at the work stations. Includes training on regulations and emergency procedures.

Personnel Training

9. Does the owner/operator maintain a personnel training program? (265.16 - Personnel Training) ✓ Yes ___ No

   A. If yes,
      1. Is the program directed by a person trained in hazardous waste management procedures? ✓ Yes ___ No
      2. Is the program designed to prepare employees to respond effectively to hazardous waste emergencies? ✓ Yes ___ No
      3. Is a training review given annually? ✓ Yes ___ No

   B. Does the owner/operator keep the following records:
      1. job title and written job description of each position? ✓ Yes ___ No
      2. description of the type and amount of introductory and continuing training? ✓ Yes ___ No
      3. documentation that training has been given to employees? Training sheet kept on each employee giving name/date of training and employee signature ✓ Yes ___ No

   C. Are these records maintained at the facility? ✓ Yes ___ No

Requirements for Ignitable, Reactive or Incompatible Waste

10. Does facility handle ignitable or reactive wastes? (265.17 - Ignitable, Reactive, Incompatible Wastes) ___ Yes ✓ No

    (Circle appropriate type(s) of waste(s).

    A. If yes, is waste separated and confined from sources of ignition or reaction, (open flames, smoking, cutting and welding, hot surfaces, frictional heat) sparks (static, electrical or mechanical), spontaneous ignition (e.g. from heat producing chemical reactions) and radiant heat? ___ Yes ___ No

    B. Are smoking and open flame confined to specifically designated locations? ___ Yes ___ No

    C. Are "No Smoking" signs posted in hazardous areas where ignitable or reactive wastes are handled? ___ Yes ___ No

11. Check containers (265.17 - Ignitable, Reactive, Incompatible Wastes)

    A. Are containers leaking or corroding or bulging? (Use narrative explanation sheet to explain containers in this condition.) ___ Yes ___ No

    B. Has the facility ever placed incompatible wastes together? ___ Yes ___ No
    If yes, what were the results? (Use narrative explanation sheet). (Look for signs of mixing of incompatible wastes. e.g., fire, toxic mist, heat generation, bulging containers, etc.)

N/A

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion or contamination of the environment? (265.31 - Maintenance and operation of facility) See attachment 1 ___ Yes ✓ No

If yes, use narrative explanations sheet to explain.

2. Is the facility equipped with (265.32 - Required equipment)

   A. Internal communications or alarm system? ✓ Yes ___ No

      1. Is it easily accessible in case of emergency? ✓ Yes ___ No

   B. Telephone or two-way radio to call emergency response personnel? ✓ Yes ___ No

   C. Portable ~~fire extinguishers~~, fire control equipment, ~~spill control equipment~~ and decontamination equipment? ✓ Yes ___ No

      1. Is this equipment tested to assure its proper operation? ✓ Yes ___ No

   D. Water of adequate volume for hoses, sprinklers or water spray system? ✓ Yes ___ No

      1. Describe source of water city

      2. Indicate flow rate and/or pressure and storage capacity if applicable. normal city pressures

3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (e.g. adequate aisle space in between barrels to check for leakage, corrosion and proper labeling, etc.) (265.35 - Required aisle space) ✓ Yes ___ No

4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) (265.37 - Arrangements with local authorities) ✓ Yes ___ No

If no, has the owner/operator attempted to make such arrangements? ___ Yes ___ No N/A

Note: These arrangements are referenced in the contingency plan.

5. In the case that more than one police or fire department might respond, is there a designated primary authority? (265.37 - Arrangements with local authorities)

✓ Yes ___ No

If yes, indicate primary authority Pineville City Fire Dept.

A. Is the fire department a city or volunteer fire department? city

6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors and equipment suppliers?
Are they readily available to the emergency coordinator?

✓ Yes ___ No

(265.37 - Arrangements with local authorities)

✓ Yes ___ No

7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? Rapides General Hospital

✓ Yes ___ No

If no, has the owner/operator attempted to do this?

___ Yes ___ No N/A

(265.37 - Arrangements with local authorities)

8. If the State, or local authorities decline to enter into the above referenced agreements, has this situation been entered in the operating record? (265.37 - Arrangements with local authorities) N/A

___ Yes ___ No

Section C - Contingency Plan and Emergency Procedures

1. Does the facility have a contingency plan? (265.52 Content of Contingency Plan)

✓ Yes ___ No

A. If yes, does it contain:

1. actions to be taken in response to emergencies? ✓ Yes ___ No
2. description of arrangements with police, fire and hospital officials? ✓ Yes ___ No
3. list of names, addresses, phone numbers of persons qualified to act as emergency coordinator? ✓ Yes ___ No
4. list of all emergency equipment at the facility? ✓ Yes ___ No
*5. evacuation plan for facility personnel? ___ Yes ✓ No see narrative below:

2. Is a copy of the contingency plan maintained at the facility? (265.53 - copies of contingency plan)

✓ Yes ___ No

3. Has a copy been supplied local police and fire depts.? (265.53 - Copies of contingency plan)

___ Yes ✓ No

* 5. There is a sentence in the contingency plan that reads: "There is no need for an evacuation plan at this facility." Representatives feel evacuation routes are plainly visible to casual observers.

4. Is the plan a revised SPCC Plan? (265.52 - content of contingency plan) SPCC Plan is separate ___ Yes ✓ No

5. Is there an emergency coordinator on-site or within short driving distance of the plant at all timee? ✓ Yes ___ No
If yes, list primary emergency coordinator: Carl Johnson - Asst. Plant Manager

Section D - Manifest System, Recordkeeping and Reporting

1. Has facility received hazardous waste from off-site since November 19, 1980? (265.71 - Use of manifest system) ___ Yes ✓ No N/A

   a. If no, questions 1, 2 and 3 not applicable.

   b. If yes, does the facility retain copies of all manifests? ___ Yes ___ No

      1. Are the manifests signed and dated and returned to the generator? ___ Yes ___ No

      2. Is a signed copy given to the transporter? ___ Yes ___ No

2. Has the facility received any hazardous waste from a rail or water (bulk shipment) transporter since Nov. 19, 1980? (265.71 - Use of manifest system) ___ Yes ___ No

   a. If yes, is it accompanied by a shipping paper ___ Yes ___ No

      1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? ___ Yes ___ No

      2. Is a signed copy given to the transporter? ___ Yes ___ No

3. Has the facility received any shipments of hazardous waste since November 19, 1980, which were inconsistent with the manifest? (265.72 - Manifest discrepancies) ___ Yes ___ No

   a. If yes, has he resolved the discrepancy with the generator and transporter? ___ Yes ___ No

      1. If no, has Regional Administrator been notified? ___ Yes ___ No

4. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? (265.76 - Unmanifested waste report) ___ Yes ___ No

   a. If yes, has he submitted an unmanifested waste report to the Regional Administrator? ___ Yes ___ No

5. Does the facility have a written operating record? (265.73 - Operating record) ✓ Yes ___ No

   a. Is a copy maintained at the facility? ✓ Yes ___ No

5. b. Does the record include

1. Description and quantity of each hazardous waste and the methods and dates of its treatment, storage or disposal at the facility? ✓ Yes ___ No

2. Location and quantity of each hazardous wasteof at each location? ✓ Yes ___ No

a. Is this information cross-referenced with specific manifest document numbers, if applicable? N/A Yes ___ No

3. (for disposal facilities only) Is the location and quantity of each hazardous waste recorded on a map or diagram of each cell or disposal area? N/A ___ Yes ___ No

4. Record and results of waste analyses? ✓ Yes ___ No

5. Reports of incidents involving implementation of the contingency plan? (If applicable) ___ Yes ___ N/A No

6. Records and results of required inspections ✓ Yes ___ No

7. Monitoring, testing or analytical data where required? ✓ Yes ___ No

8. Closure cost estimates and for disposal facilities, post-closure cost estimates? May 19th, 1983 — $ 5,800 (inflation factor of 1.06 used) ✓ Yes ___ No

Note: The dimensions of the impoundment are given, but not an actual approximation of amount of waste on-site.

Section E - Plans and Reports

1. Have all plans and reports been visually inspected and /or been made available for inspection? (265.74 - Availability, retention and disposition of records) ✓ Yes ___ No

List plans and/or reports not made available for inspection.

_____

_____

2. Did operator provide inspector with a drawing of the facility? ✓ Yes ___ No

a. If yes, please indicate which are hazardous waste facilities on the drawing. See Attachment 2

3. Indicate types of hazardous waste facilities.

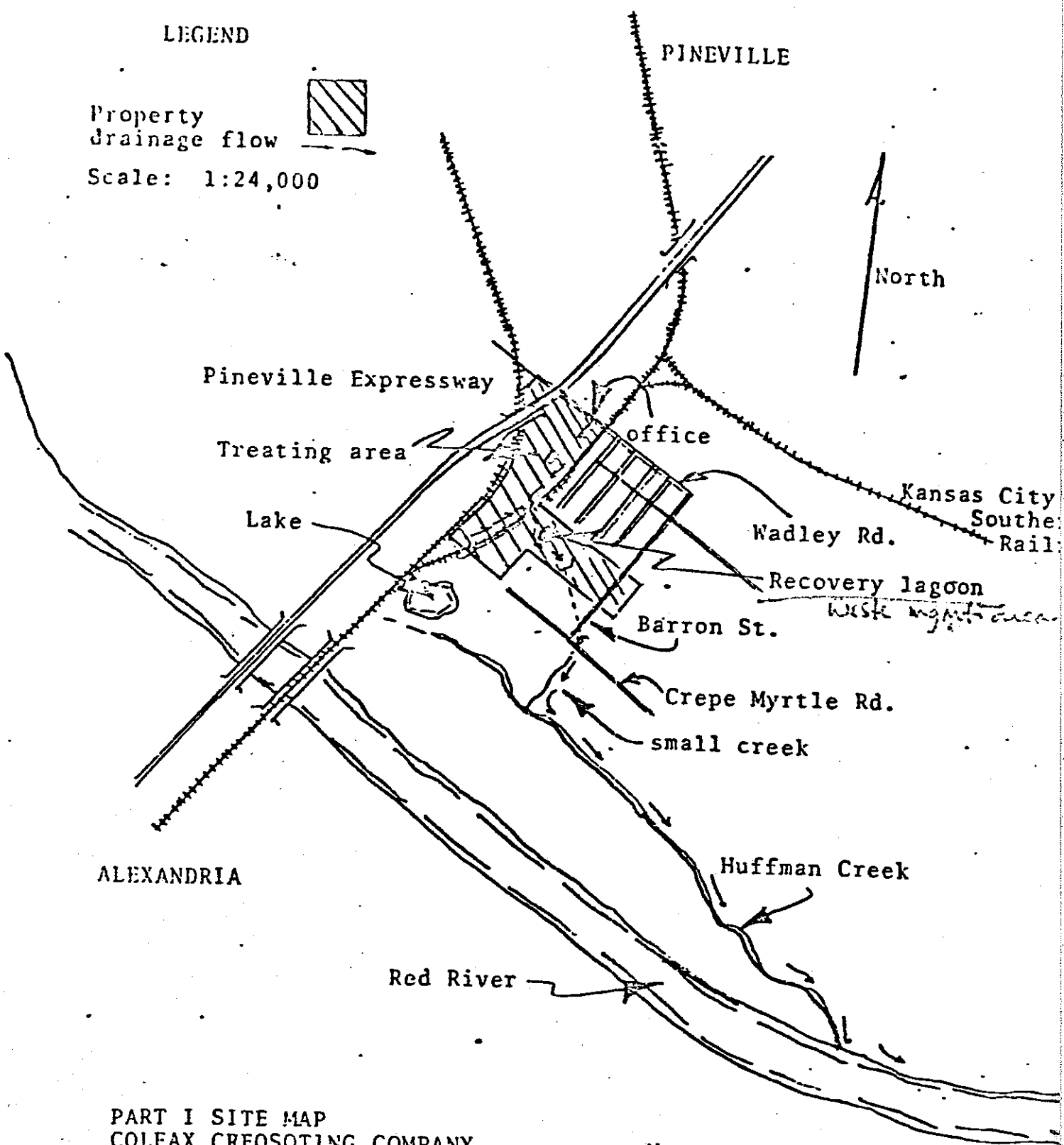
___ Containers
___ Tanks
_✓_ Surface Impoundments
___ Waste Piles
___ Land Treatment
___ Landfill
___ Incinerator
___ Thermal Treatment
___ Chemical, Physical and Biological Treatment
_✓_ Groundwater Monitoring Program

COLFAX
LAD008184
Attachment 1

Section B - Preparedness/Prevention

1. There was some spillage of preserving materials in the process areas. Most of this spillage was directly on the ground. At this time, the facility is in the process of diking and covering this area. The extent of contamination to the environment was difficult to assess from just observation.

Attachment 2



PART I SITE MAP
COLFAX CREOSOTING COMPANY
PINEVILLE, LA.

Note: surface contours, etc. shown on other sheets

Revised 8/2/82

1 impoundment

SURFACE IMPOUNDMENTS CHECKLIST
Subpart K - Surface Impoundments 265.220

NOTE: Check all surface impoundments. Fill out one checklist for any impoundment in violation. Fill out one checklist for all other impoundments in compliance. Indicate number of surface impoundments at the facility.

1. Are there any surface impoundments which are not being used which the facility does not plan to use in the future? see narrative on next Page ✓ Yes ___ No

   a. If yes, has all hazardous waste and hazardous waste residue been removed from the impoundment? ___ Yes ✓ No

2. Are impoundments presently used to treat or (store) waste? ✓ Yes ___ No

3. Does the impoundment appear to maintain at least 2 feet (60 cm) of freeboard? ✓ Yes ___ No

   a. If no, what was the freeboard? _____

4. Is there evidence of overtopping of the dike? ___ Yes ✓ No

   If yes, please describe. _____

5. Does the impoundment have a containment system? ✓ Yes ___ No

   a. Does the earthen dike have adequate protective cover (e.g. grass, shale, rock) to minimize wind and water erosion? (Use narrative explanation sheet to explain deficiencies.) ✓ Yes ___ No

   b. Provide description of containment. dike (earthen); some weed cover

6. What wastes are treated or (stored) in the impoundment? (Use narrative explanations sheet). K001

7. Are hazardous wastes chemically treated in the impoundment? ___ Yes ✓ No

   a. If yes, are N/A

      1. Waste analyses and trial tests conducted on these wastes or ___ Yes ___ No

      2. Does the owner/operator have written documented information on similar treatment of similar wastes under similar operating conditions? ___ Yes ___ No

   b. Is this information retained in the operating record? ___ Yes ___ No

8. Is the impoundment inspected daily to check freeboard level? ✓ Yes ___ No

9. Is the impoundment, dike and vegetation surrounding the dike inspected to detect leaks, deterioration or failures at least once a week? (265.226 - Inspections) ✓ Yes ___ No

10. Does the facility maintain a record of the closure plan on site? ✓ Yes ___ No

11. Are ignitable or reactive wastes placed in the impoundment? ___ Yes ✓ No

    a. If no, do not complete b and c.
    b. If yes, are they treated, rendered or mixed before or immediately after placement in the impoundment so it no longer meets the definition of ignitable or reactive? ___ Yes ___ No

    OR

    c. Is the impoundment used solely for emergencies? ___ Yes ___ No

        1. If yes, has further treatment, storage or disposal been conducted on these wastes? Describe this situation.

12. Has the facility ever placed incompatible wastes in the impoundment? ___ Yes ✓ No

    a. If yes, what were the results. (Use narrative explanation sheet.) (Look for signs of mixing of incompatible wastes e.g., fire, toxic mist, heat generation, bulging containers, etc.) N/A

13. What is the impoundment lined with? impoundment is not lined.

*1. At this time wastewater is no longer being put into the ponds. The wastewater is run back through the system and the treating compounds are removed. The water is discharged, under permit, to city sewer. The old materials in the impoundment have not been removed.

Closure

A. Does the facility have a closure plan? Yes ✓ No ___
If yes, complete the following checklist.

1. Does the plan include:
   a. A description of how and when the facility will be partially, then finally closed? Yes ___ No ___
   (how → yes; when → no – plan says facility will operate in perpetuity – no date for closure given)

   b. An up-to-date estimate of the maximum inventory of wastes in storage and treatment at the time of inspection? Yes ___ No ✓

   c. A description of decontamination procedures for facility equipment? Yes ___ No ✓

   d. An estimate of expected year of closure? Yes ___ No ✓

2. Does the plan include a schedule for final closure? Yes ___ No ✓
   If yes, does it include:

   a. Time estimates for each phase of closure for each area? Yes ___ No ✓

   b. Total time estimate for closure? Yes ___ No ✓

3. Using narrative explanations sheet, give a brief summary of how the facility plans to close each area of hazardous waste management. See narrative Attachment 1

4. Has the plan been amended as necessary to reflect changes in facility operations or design? Yes ___ No ___ N/A

5. Are cost estimates available and modified as necessary? If yes, give date of latest cost estimate adjustment? Yes ✓ No ___
   May 19, 1983 ; $5,800 (using 1.04 adjustment)

B. Have closure activities begun at the facility? Yes ___ No ✓ N/A

1. If yes,
   a. Was the closure plan submitted to the Regional Administrator at least 180 days prior to beginning these activities? Yes ___ No ___

   b. Were all wastes treated or disposed of within 90 days of the final receipt of wastes? Yes ___ No ___

   c. Do the actual closure activities correspond to those written in the closure plan? Yes ___ No ___

   If no, give explanation.

2. Was closure completed within 180 days of receipt of final volume of wastes? Yes ___ No ___
   If no, give explanation.

3. At completion, did the facility submit a certification of closure to the Regional Administrator? Yes ___ No ___
   If yes, was it signed by both the owner/operator and an independent registered professional engineer? Yes ___ No ___

COLFAX
Attachment

Closure - See plan (Attachment 4)

3. Facility plans to remove water from on top of th hazardous sludge. Soil pH in the impoundment will be adjusted and nutrients added to degrad the creosote wastes. Sides and bottom will be disced and testing will be done.

Note: There was some discussion between state and Colfax officials as to the proposal for = landfarming" this area as a closure mechanism. Problems regarding interim status and permit requirements were addressed and this area of concern will be raised with state permit staff.

APPENDIX A-1

FACILITY INSPECTION FORM FOR COMPLIANCE WITH INTERIM STATUS STANDARDS COVERING GROUND-WATER MONITORING

Company Name: COLFAX CREOSOTING COMPANY ; EPA I.D. Number: LAD008184616

Company Address: Wadley Road ; Inspector's Name: Holly ANDERSON - JOINT EPA
TOM Patterson - DNR

Pineville Louisiana

Company Contact/Official: Clyde Norton ; Branch/Organization: _____

~~Title~~ John Ball - Consultant ; Date of Inspection: 11/14/83
Vice Pres.
Ball Engineering

Type of facility: (check appropriately)

	Yes	No	Unknown	Waived
a) surface impoundment	✓			
b) landfill		✓		
c) land treatment facility		✓		
d) disposal waste pile*		✓		

Ground-Water Monitoring Program

1. Was the ground-water monitoring program reviewed prior to site visit? If "No",		✓		
a) Was the ground-water program reviewed at the facility prior to site inspection?	✓			
2. Has a ground-water monitoring program (capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility) been implemented? 265.90(a)				

See groundwater checklists and attachments

This will not be evaluated by inspector.

*Listed separate from landfill for convenience of identification.

		Yes	No	Unknown	Waived
one well has been installed and designated upgradient. Check Appendix B for data used to determine this designation	3. Has at least one monitoring well been installed in the uppermost aquifer hydraulically upgradient from the limit of the waste management area? 265.91(a)(1)	✓			
	a) Are ground-water samples from the uppermost aquifer, representative of background ground-water quality and not affected by the facility (as ensured by proper well number, locations and depths?)				
check Appendix B for details	4. Have at least three monitoring wells been installed hydraulically downgradient at the limit of the waste handling or management area? 265.91(a)(2)		✓		only 2 wells have been designated as down-gradient wells
	a) Do well number, locations and depths ensure prompt detection of any statistically significant amounts of HW or HW constituents that migrate from the waste management area to the uppermost aquifer?				
	5. Have the locations of the waste management areas been verified to conform with information in the ground-water program?	✓			
	a) If the facility contains multiple waste management components, is each component adequately monitored?	N/A			
	6. Do the numbers, locations, and depths of the ground-water monitoring wells agree with the data in the ground-water monitoring system program? If "No", explain discrepancies.	locations/numbers ✓			depths not determined during inspection
See Appendix B.	7. Well completion details. 265.91(c)				
	a) Are wells properly cased?				
	b) Are wells screened (perforated) and packed where necessary to enable sampling at appropriate depths?				
	c) Are annular spaces properly sealed to prevent contamination of ground-water?				

	Yes	No	Unknown
8. Has a ground-water sampling and analysis plan been developed? 265.92(a)	✓		
a) Has it been followed?	✓		
b) Is the plan kept at the facility?	✓		
c) Does the plan include procedures and techniques for:			
1) Sample collection?	✓		
2) Sample preservation?	✓		
3) Sample shipment?	✓		
4) Analytical procedures?	✓		
5) Chain of custody control?	✓		
9. Are the required parameters in ground-water samples being tested quarterly for the first year? 265.92(b) and 265.92 (c)(1)	✓		
a) Are the ground-water samples analyzed for the following:			
1) Parameters characterizing the suitability of the ground-water as a drinking water supply? 265.92(b)(1)	✓		
2) Parameters establishing ground-water quality? 265.92(b)(2)	✓		
3) Parameters used as indicators of ground-water contamination? 265.92(b)(3)	✓		
(i) For each indicator parameter are at least four replicate measurements obtained at each upgradient well for each sample obtained during the first year of monitoring? 265.92(c)(2)	✓		
(ii) Are provisions made to calculate the initial background arithmetic mean and variance of the respective parameter concentrations or values obtained from the upgradient well(s) during the first year? 265.92(c)(2)	✓		
b) For facilities which have completed first year ground-water sampling and analysis requirements:			N/A
1) Have samples been obtained and analyzed for the ground-water quality parameters at least annually? 265.92(d)(1)			
2) Have samples been obtained and analyzed for the indicators of ground-water contamination at least semi-annually? 265.92(d)(2)			

	Yes	No	Unknown
c) Were ground-water surface elevations determined at each monitoring well each time a sample was taken? 265.92(e)	✓		
d) Were the ground-water surface elevations evaluated annually to determine whether the monitoring wells are properly placed? 265.93(f)	✓		
e) If it was determined that modification of the number, location or depth of monitoring wells was necessary, was the system brought into compliance with 265.91(a)? 265.93(f)		N/A	
10. Has an outline of a ground-water quality assessment program been prepared? 265.93(a)*	✓		
a) Does it describe a program capable of determining:			
1) Whether hazardous waste or hazardous waste constituents have entered the ground water?			
2) The rate and extent of migration of hazardous waste or hazardous waste constituents in ground water?			
3) Concentrations of hazardous waste or hazardous waste constituents in ground water?			
b) After the first year of monitoring, have at least four replicate measurements of each indicator parameter been obtained for samples taken for each well? 265.93(b)			
1) Were the results compared with the initial background means from the upgradient well(s) determined during the first year?			
(i) Was each well considered individually?			
(ii) Was the Student's t-test used (at the 0.01 level of significance)?			
2) Was a significant increase (or pH decrease as well) found in the:			
(i) Upgradient wells			
(ii) Downgradient wells			
If "Yes", Compliance Checklist A-2 must also be completed.			

See gw attachment 1

N/A

N/A

*See note Page 2-10

	Yes	No	Unknown
11. Have records been kept of analyses for parameters in 265.92(c) and (d)? 265.94(a)(1)	✓		
12. Have records been kept of ground-water surface elevations taken at the time of sampling for each well? 265.94(a)(1)	✓		
13. Have records been kept of required elevations in 265.93(b)? 265.94(a)(1)	✓		
14. Have the following been submitted to the Regional Administrator 265.94(a)(2) :* to state			
a) Initial background concentrations of parameters listed in 265.92(b) within 15 days after completing each quarterly analysis required during the first year?			
b) For each well, have any parameters whose concentrations or values have exceeded the maximum contaminant levels allowed in drinking water supplies been separately identified?			
c) Annual reports including:			
1) Concentrations or values of parameters used as indicators of ground-water contamination for each well along with required evaluations under 265.93(b)?			
2) Any significant differences from initial background values in up-gradient wells separately identified?			
3) Results of the evaluation of ground-water surface elevations?			

this information is available from state files

*EPA will be proposing (Spring 1982) to replace this reporting requirement with an exception reporting system where reports will be submitted only where maximum contaminant levels or significant changes in the contamination indicators or other parameters are observed. EPA has delayed compliance stage for 14 a) above until August 1, 1982 (Federal Register, February 23, 1982, p.7841-7842) to be coupled with exception reporting in the interim.

APPENDIX B

GROUND-WATER MONITORING AND ALTERNATE SYSTEM
TECHNICAL INFORMATION FORM

1.0 Background Data:

Company Name: COLFAX CREOSOTING ; EPA I.D.#: LAD008184616
Company Address: Wadley Road - PO Box 231
Pineville - Louisiana

Inspector's Name: Tom Patterson - DNR ; Date: 11/14/83
Holly Anderson - EPA

1.1 Type of facility (check appropriately):

1.1.1 surface impoundment ✓
1.1.2 landfill
1.1.3 land treatment facility
1.1.4 disposal waste pile

1.2 Has a ground-water monitoring system been established? (Y/N) Y

1.2.1 Is a ground-water quality assessment program outlined or proposed? (Y/N) Y

If Yes, GW See Attachment 1

1.2.2 Was it reviewed prior to the site visit? (Y/N) N

1.3 Has a ground-water quality assessment program been implemented or proposed at the site? (Y/N) N the facility has not officially recognized a contamination problem

If yes, Appendix C, Ground-Water Quality Assessment Program Technical Information Form must be utilized also.

2.0 Regional/Facility Map(s)

2.1 Is a regional map of the area, with the facility delineated, included? full-scale contour map was too large to copy and include in inspection - smaller regional map was included - (Y/N) Y

If yes,

2.1.1 What is the origin and scale of the map? See GW Attachment 2 & 3

2.1.2 Is the surficial geology adequately illustrated? (Y/N) Y

2.1.3 Are there any significant topographic or surficial features evident? (Y/N) N

If yes, describe _____

2.1.4 Are there any streams, rivers, lakes, or wet lands near the facility? (Y/N) Y

If yes, indicate approximate distances from the facility Huffman Creek (immediately South of facility) flows to the Red River (approximately 1 mile from the recovery lagoon)

2.1.5 Are there any discharging or recharging wells near the facility? (Y/N) ____

If yes, indicate approximate distances from the facility. _____

See gw attachment 4

2.2 Is a regional hydrogeologic map of the area included? (This information may be shown on 2.1) (Y/N) N

If yes: no aerial view of recharge/discharge areas

2.2.1 Are major areas of recharge/dishcarge shown? (Y/N) N/A

If yes, describe. _____

2.2.2 Is the regional ground-water flow direction indicated? regional is Not done; See gw attachment 5 (Y/N) N

2.2.3 Are the potentiometric contours logical? (Y/N) ____

If not, explain. See gw Attachment 5

the groundwater flow was determined by facility using water elevations during sampling, rather than by regional mapping.

2.3 Is a facility plot plan included? See Attachment 6 (Y/N) Y

2.3.1 Are facility components (landfill areas, impoundments, etc.) shown? See "recovery lagoon" on map (Y/N) Y

2.3.2 Are any seeps, springs, streams, ponds, or wetlands indicated? (Y/N) Y

Note: Wells were installed first several years ago. Borings were done on 4/4/83.

3.0 Soil Boring/Test Pit Details

3.1 Were soil borings/test pits made under the supervision of a qualified professional? (Y/N) Y

If yes,

3.1.1 Indicate the individual(s) and affiliation(s): N.J. Yoesha Jr., P.E.; GeoTechnical Testing Lab., Inc. - 226 Parkwood Drive PO Box 7734, Alexandria LA. 71306

3.1.2 Indicate the drilling/excavating contractor, if known Lee Well Drilling, Alexandria LA

3.2 If soil borings/test pits were made, indicate the method(s) of drilling/excavating:

- Auger (hollow or solid stem) truck-mounted auger
- Mud rotary
- Air rotary
- Reverse rotary
- Cable tool
- Jetting
- Other, including excavation (explain)

3.3 List the number of soil borings/test pits made at the site

3.3.1 Pre-existing 0

3.3.2 For RCRA compliance 3

3.4 Indicate borehole diameters and depths (if different diameters and depths use TABLE B-1).

3.4.1 Diameter: 4"

3.4.2 Depth: One at 40', 2 at 30'

3.5 Were lithologic samples collected during drilling? (Y/N) Y

If yes,

3.5.1 How were samples obtained? (Check method(s))

- Split spoon
- Shelby tube, or similar Standard seamless
- Rock coring
- Ditch sampling
- Other (explain)

Samples taken about every 5'

2.3.3 Are the locations of any monitoring wells, soil borings, or test pits shown? See Attachments 7 + 8 (Y/N) Y

2.3.4 Is the facility a multi-component facility? (Y/N) N

If yes:

2.3.4.1 Are individual components adequately monitored? (Y/N) N/A

2.3.4.2 Is a Waste Management Area delineated? (Y/N) N/A

2.4 Is a site water table (potentiometric) contour map included? (Y/N) N

If yes, only Attachment 5 is available

2.4.1 Do the potentiometric contours appear logical based on topography and presented data? (Consult water level data) (Y/N) N/A

2.4.2 Are groundwater flowlines indicated? (Y/N) ____

2.4.3 Are static water levels shown? (Y/N) ____

2.2.4 May hydraulic gradients be estimated? (Y/N) ____

2.4.5 Is at least one monitoring well located hydraulically upgradient of the waste management area(s)? (Y/N) ____

2.4.6 Are at least three monitoring wells located hydraulically downgradient of the waste management area(s)? (Y/N) ____

2.4.7 By their location, do the upgradient wells appear capable of providing representative ambient groundwater quality data? (Y/N) ____

If no, explain. _____

_____

_____

INFORMATION TABLE B-1

BORING NO.	DEPTH	DIAMETER
See gw attachment 9		

3.5.2 At what interval were samples collected? 5'

3.5.3 Were the deposits or rock units penetrated / described? (boring logs, etc.) (Y/N) Y

See gw Attachment 9 - Subsurface Investigation

3.6 If test pits were excavated at the site, describe procedures. N/A

4.0 Well Completion Detail

4.1 Were the wells installed under the supervision of a qualified professional? wells were no installed (Y/N) ~~N~~ N/A

If yes: under supervision of Geotechnical Labs. Inc.

4.1.1 Indicate the individual and affiliation, if known

4.1.2 Indicate the well construction contractor, if known Lee Drilling, Alexandria

4.2 List the number of wells at the site

4.2.1 Pre-existing 0

4.2.2 For RCRA Compliance 3 one well was plugged; #3 well is new; original #3 was plugge

4.3 Well construction information (fill out INFORMATION TABLE B-2)

4.3.1 If PVC well screen or casing is used, are joints (couplings):

- Glued on ✓
- Screwed on —

4.3.2 Are well screens sand/gravel packed? (Y/N) Y

Note: No well completion data was available for any wells except the new #3 well. All other information is based on site personnel recollections of well installation.

INFORMATION TABLE B-2

	WELL NO.	1	2	3			
	GROUND ELEVATION	101'	94'	94'			
	TOTAL DEPTH	55'	58'	62'			
WELL CASING	TYPE MATERIAL	PVC	PVC	PVC			
	DIAMETER	4"	4"	4"			
	LENGTH						
	STICK-UP	1'6"	1'6"	12"			
	TOP ELEVATION						
	BOTTOM ELEVATION						
WELL SCREEN	DEPTH TOP/BOTTOM	45/55	48/58	52/62			
	TYPE MATERIAL	PVC	PVC	PVC			
	DIAMETER						
	LENGTH						
	SLOT SIZE	0.01"	0.01"	0.01"			
	TOP ELEVATION						
	BOTTOM ELEVATION						
OPEN HOLE OR SAND/GRAVEL PACK	DEPTH TOP/BOTTOM						
	DIAMETER						
	LENGTH						
	TOP ELEVATION						
	BOTTOM ELEVATION						

4.3.3 Are annular spaces sealed? (Y/N) Y

If yes, describe:

- bentonite slurry
- Cement grout ✓
- Other (explain) _____

- Thicknesses of seals _____

4.3.4 If "open hole" wells, are the cased portions sealed in place? (Y/N) _____

If yes, describe how: N/A

4.3.5 Are there cement surface seals? (Y/N) Y

If yes,

- How thick? unknown

4.3.6 Are the wells capped? (Y/N) Y

If yes,

- Do they lock? (Y/N) Y

4.3.7 Are protective standpipes cemented in place? (Y/N) Y

4.3.8 Were wells developed? (Y/N) _____

If yes, check appropriate method(s): unknown – no records kept

- Air lift pumping _____
- Pumping and surging _____
- Jetting _____
- Bailing _____
- Other (explain) _____

5.0 Aquifer Characterization

5.1 Has the extent of the uppermost saturated zone (aquifer) in the facility area been defined? (Y/N) Y

See gw attachment 5

If yes,

5.1.1 Are soil boring/test pit logs included? not used to determine aquifers (Y/N) N

5.1.2 Are geologic cross-sections included? (Y/N) Y

See gw attachment 10

5.2 Is there evidence of confining (low permeability) layers beneath the site? (Y/N) Y

If yes, based on consultant's answer using site boring information

5.2.1 Is the areal extent and continuity indicated? (Y/N) N

5.2.2 Is there any potential for saturated conditions (perched water) to occur above the uppermost aquifer? (Y/N) Y

If yes, give details: observed during boring, according to consultant

a) Should or is this perched zone being monitored? (Y/N) N

Explain _____

5.2.3 What is the lithology and texture of the uppermost saturated zone (aquifer)? red coarse sand - 34' below surface

5.2.4 What is the saturated thickness, if indicated? 27'

answers from consultant

5.3 Were static water levels measured? (Y/N) Y

If yes,

5.3.1 How were the water levels measured (check method(s)).

- Electric water sounder —
- Wetted tape ✓
- Air line —
- Other (explain) —

5.3.2 Do fluctuations in static water levels occur? (Y/N) N

If yes, fluctuations are only in amounts of several inches

5.3.2.1 Are they accounted for (e.g. seasonal, tidal, etc.)? (Y/N) N/A

If yes, describe: _____

5.3.2.2 Do the water level fluctuations alter the general ground-water gradients and flow directions? (Y/N) N/A

If yes,

5.3.2.3 Will the effectiveness of the wells to detect contaminants be reduced? (Y/N) N/A

Explain _____

_____

_____

5.3.2.4 Based on water level data, do any head differentials occur that may indicate a vertical flow component in the saturated zone? (Y/N) N

If yes, explain _____

_____

_____

5.4 Have aquifer hydraulic properties been determined? (Y/N) N

N/A

If yes,

5.4.1 Indicate method(s):

- Pumping tests ____
- Falling/constant head tests ____
- Laboratory tests (explain) _____

_____

_____

5.4.2 If determined, what are the values for:

- Transmissivity ____
- Storage coefficient ____
- Leakage ____
- Permeability ____
- Porosity ____
- Specific capacity ____

5.4.3 In cases where several tests were undertaken, were discrepancies in the results evident? (Y/N) ____

If yes, explain _____

_____

5.4.4 Were horizontal ground-water flow velocities determined? (Y/N) N

If yes, indicate rate of movement _____ N/A

_____

6.0 Well Performance

6.1 Are the monitoring wells screened in the uppermost aquifer? (Y/N) Y

6.1.1 Is the full saturated thickness screened? (Y/N) N

6.1.2 For single completions, are the intake areas in the: (check appropriate levels)

- Upper portion of the aquifer ✓ for #3
- Middle of the aquifer —— unknown for
- Lower portion of the aquifer —— #1 + 2

6.1.3 For well clusters, are the intake areas open to different portions of the aquifer? (Y/N) N/A

6.1.4 Do the intake levels of the monitoring wells appear to be justified due to possible contaminant density and groundwater flow velocity? not evaluated by inspector (Y/N) ——

7.0 Ground-Water Quality Sampling

7.1 Is a sampling (groundwater quality) program and schedule included? see gw Attachment 11 (Y/N) Y

7.2 Are sample collection field procedures clearly outlined? (Y/N) Y

7.2.1 How are samples obtained: (check method(s))

- Air lift pump —
- Submersible pump —
- Positive displacement pump —
- Centrifugal pump —
- Peristaltic or other suction-lift pump —
- Bailer ✓
- Other (describe) —

7.2.2 Are all wells sampled with the same equipment and procedures? (Y/N) Y

If no, explain bailer used on all wells;

7.2.3 Are adequate provisions included to clean equipment after sampling to prevent cross-contamination between wells? (Y/N) Y

previously, for first sampling, only one bailer was used. It was cleaned between wells. Colfax now has 3 dedicated bailers.

7.2.4 Are organic constituents to be sampled? (Y/N) Y

If yes,

7.2.4.1 Are samples collected with equipment to minimize absorption and volatilization? (Y/N) ____

If yes,

Describe equipment bailers are used - but water sample must be poured from bailer to sample containers

8.0 Sample Preservation and Handling

8.1 Have appropriate sample preservation and preparation procedures been followed (filtration and preservation where appropriate)? (Note: samples are not filtered) (Y/N) Y

8.2 Are samples refrigerated? because of necessity to ship samples via commercial carriers (Y/N) N

8.3 Are EPA recommended sample holding period requirements adhered to? See note on this page (Y/N) N

8.4 Are suitable container types used? all containers are plastic (Y/N) ____

8.5 Are provisions made to store and ship samples under cold conditions (ice packs, etc.)? (Y/N) N

8.6 Is a chain of custody control procedure clearly defined? (Y/N) Y

8.7 Is a specific chain of custody form illustrated? (Y/N) Y

If yes,

8.7.1 Will this form provide an accurate record of sample possession from the moment the sample is taken until the time it is analyzed? See form in gw attachment 11 (Y/N) Y

Note: Samples are put on a bus, shipped, and picked up next day. Most holding times are met, however, if a certain parameter requires only 24 hr. holding time, that usually is not met.

9.0 Sample Analysis and Record Keeping

9.1 Is sample analysis performed by a qualified laboratory? (Y/N) ____

Indicate lab Savannah Laboratories and Environmental Services ~~P.O Box 13842 Savannah Georgia~~ (912) 354-7858

9.2 Are analytical methods described in the records? (Y/N) Y

EPA methods referenced on analysis sheets

9.2.1 Are analytical methods acceptable to EPA? (Y/N) Y

9.3 Are the required drinking water suitability parametters tested for? (Y/N) Y

9.4 Are the required groundwater quality parameters tested for? (Y/N) Y

Some lab work also done by John Ball, Ball Engineering Alabama

9.5 Are the required groundwater contamination indicator parameters tested for? (Y/N) Y

9.6 Are any analytical parameters determined in the field? (Y/N) Y

. Identify:

- pH —
- Temperature ✓
- Specific conductance —
- Other (describe) —

9.7 Is a plan included to record information about each sample collected during the groundwater monitoring program? (Y/N) Y — See example form in GW Attachment II

9.7.1 Are field activity logs included? (Y/N) Y

9.7.2 Are laboratory results included? kept separate (Y/N) N

9.7.3 Are field procedures recorded? (Y/N) Y

9.7.4 Are field parameter determinations included? (Y/N) N

9.7.5 Are the names and affiliation of the field personnel included? (Y/N) Y

9.8 Are statistical analyses planned or shown for all water quality results where necessary? (Y/N) Y

9.8.1 Is an analysis program set-up which adheres to EPA guidelines? (Y/N) Y

9.8.2 Is Student's t-test utilized? (Y/N) Y
If other evaluation procedure used, identify _____

9.8.3 Are provisions made for submitting analysis reports to the Regional Administrator? all analysis submitted to Louisiana DNR office (Y/N) Y

10.0 Site Verification

10.1 Plot Plan indicating the locations of various facility components, ground-water monitoring wells, and surface waters? (Y/N Y)

10.1.1 Is the plot plan used for the inspection the same as in the monitoring program plan documentation? (Y/N) Y

If not, explain _____

10.1.2 Are all of the components of the facility identified during the inspection addressed in the monitoring program documentation? (Y/N) Y

If not, explain _____

_____

10.1.3 Are there any streams, lakes or wetlands on or adjacent to the site? (Y/N) Y

If yes, indicate distances from waste management areas _____

Stream immediately adjacent to impoundment (as noted on maps)

10.1.4 Are there any signs of water quality degradation evident in the surface water bodies? (Y/N) N

If yes, explain _____

_____

_____

10.1.5 Is there any indication of distressed or dead vegetation on or adjacent to the site? (Y/N) N

If yes, explain _____

_____

_____

10.1.6 Are there any significant topographic or surficial features on or near the site (e.g., recharge or discharge areas)? (Y/N) N

If yes, explain _____

_____

10.1.7 Are the monitor well locations and numbers in agreement with the monitoring program documentation? (Y/N) Y

If no, explain _____

_____

10.1.7.1 Were locations and elevations of the monitor wells surveyed into some known datum? (Y/N) Y

If not, explain John Ball explained procedure used to determine the surveyed datum: he used a USGS contour map and found a 100' contour line near the railroad track. As the railroad track was very near the well sites, he determined 100' to be the baseline datum.

10.1.7.2 Were the wells sounded to determine total depth below the surface? (Y/N) N

If not, explain State facility not prepared; EPA equipment not available on day of inspection

10.1.7.3 Were discrepancies in total depth greater than two feet apparent in any well? (Y/N) ____ N/A

If yes, explain _____

_____

10.1.8 Was ground water encountered in all monitoring wells? (Y/N) ____ N/A

If not, indicate which well(s) were dry _____

_____

10.1.9 Were water level elevations measured during the site visit? (Y/N) N

If yes, indicate well number and water level elevation _____

_____

If not, explain See 10.1.7.2.

_____

COLFAX
LAD008184611
Attachment 5

As per Environmental Services policy, the following is a summary of the exit interview:

1. There was a general discussion of the most recent order filed by the state against Colfax. It was determined that the questions should be addressed to Maurice Lasseure (See copy - Attachment 6)
2. State inspector told the site there were no major problems noted during the inspection.
3. It was also discussed that Colfax would like to use creosote pitch with asphalt in making roads inside the plant. LA is to be said to file a proposal with permit section and discuss the relationship of the creosote pitch to materials normally used in making asphalt.